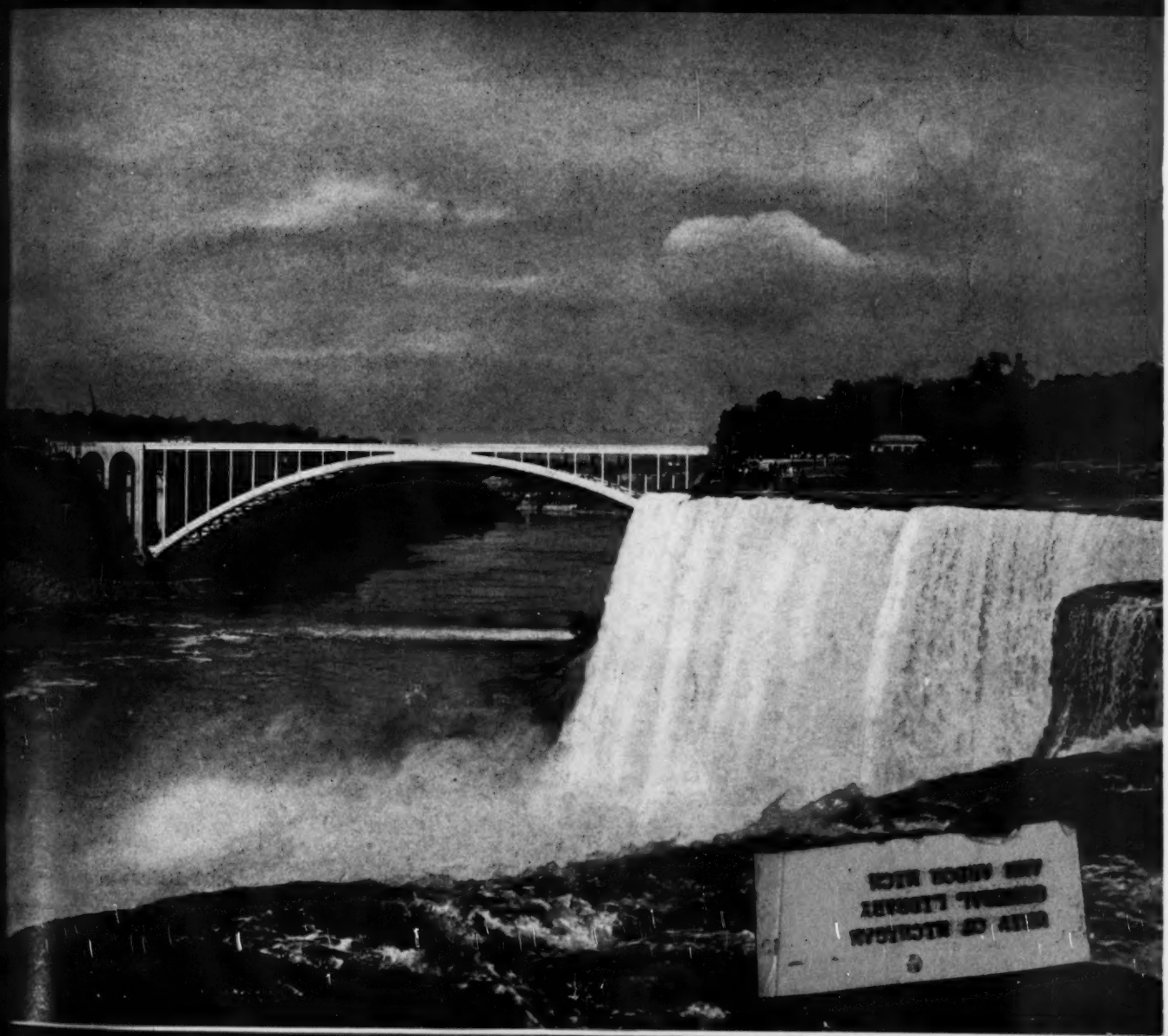
ENGINEERING NEWS-RECORD

Rainbow Bridge at Niagara Falls, world's longest hingeless arch span, to be opened Nov. 1.



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The Week In Engineering and Construction

ENGINEERING NEWS-RECORD • OCTOBER 30, 1941

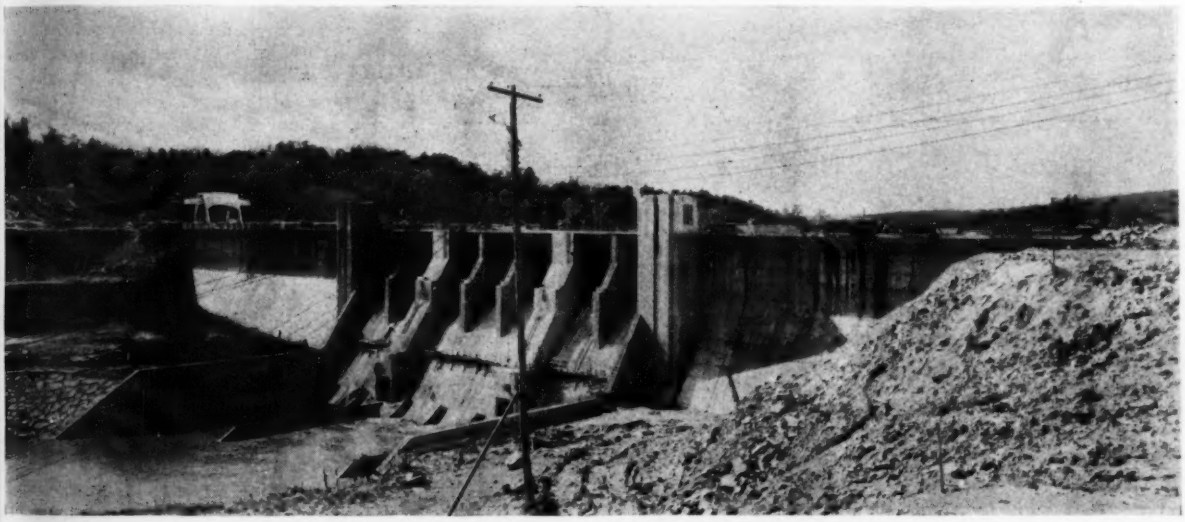
OPM adds new branch to stabilize building duties

John L. Haynes appointed head of new office, but duties will not become definite for several weeks. New set-up seen as improvement over previous arrangements.

Office of Production Management machinery for dealing with construction matters is gradually becoming stabilized. In the past, there have been few OPM agencies devoting their full attention to construction; the industry has been dealt with in the main by groups most of whose activities centered on the manufacturing industries.

A new construction branch has been established in the Civilian Allocation Division of OPM. It is headed by John L. Haynes who has been head of the lumber and building materials branch. Exact duties of this branch will not crystallize for several weeks, but as of today it appears that there are five groups, with more or less clearly defined limits of jurisdiction, dealing with construction. Direct construction for the Army and Navy falls under the construction branch of OPM's Production Division; this is headed by W. V. Kahler. Construction of power projects falls under the power branch headed by J. A. Krug. Priorities on housing are handled for OPM by Sullivan Jones; decentralized machinery, working through FHA offices and the field offices of OPM and the housing coordinator, has been set up for housing matters, and builders should have little occasion to deal direct with OPM. State and city projects come under a state and municipal branch of the Civil Allocation Division, headed by Maury Maverick. Everything else, it appears, falls under Mr. Haynes' group.

There are still some doubtful points, of course. Thus it has not yet been es-



Nimrod Dam in Arkansas to be completed next month

The first of the flood-control dams in Arkansas will be completed early in November when Russ Mitchell, Inc., Austin, Tex. and Brown & Root, Inc., Houston, Tex. raise the American flag over the $3,500,000 Nimrod Dam on the Fourche La Fave River in Perry County, Ark.

The Nimrod project is being completed four months ahead of schedule and will release construction equipment for national defense work. The cableway used in construction of the new dam is now being dismantled and will be used on the Wolf Creek Dam work on the Cumberland River in Kentucky, while the concrete plant has been sold to the Tennessee Valley Authority.

Nimrod Dam, which was designed by and constructed under the supervision of the Little Rock District of the U. S. Engineers, will provide 305,000 acre-ft. of storage between the conservation pool and the spillway crest, which is sufficient to control the maximum flood on the Fourche La Fave River. Provisions have been made for the installation of spillway crest gates to provide for future increase in reservoir capacity, so that the dam could be operated for hydroelectric power generation if desired. With the 14-ft. crest gates installed an additional 300,000 acre-feet of capacity will be added to the reservoir. With a maximum height of 97 ft. above stream bed and a total length of 986 ft., Nimrod Dam contains 103,000 cu.yd. of concrete and has seven 4 ft. x 6 ft. conduits controlled by hydraulically operated slide gates and two 5 ft. x 5 ft. conduits with Howell-Bunger valves.

K. E. McDougal has been job superintendent and William Pappenheimer is resident engineer for the federal government.

tablished whether Mr. Haynes or Mr. Maverick will deal with highway matters.

This is a complicated looking set-up, but it's a considerable improvement over previous arrangements. As far as any particular project is concerned, there is one definite place to go with supply problems. Previously, an application for, say, a project rating would have to clear through the branches dealing with each of the materials needed for the project.

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Water and sewer work proposed at Mobile, Ala.

The city commission of Mobile, Ala., has submitted to the Public Works Administration a proposal calling for an expenditure of $1,300,000 for water works and sewage projects. The plan is for the PWA to supply 50 percent of the cost. The first proposal was for a $2,500,000 extension, but the PWA authorized a grant of only $496,000, which the city held inadequate for a program of that size.

Toronto officials place pumping plant in service

The board of control of the City of Toronto, following a report from the city's director of water filtration, Norman J. Howard, as to increasing pollution of the city's water supply, Nov. 1 opened the new Victoria Park duplicate pumping and filtration plant. This large plant, representing an investment of about $15,000,000, was completed two years ago but has not been used because of the operating cost, which is estimated at about $10,000 for the balance of the present year.

The board in its deliberations considered a report from Mr. Howard that on a recent Sunday it was necessary to reduce the city pumping from Lake Ontario from the normal 60 mgd. to only 40 mgd. Furthermore, because of pollution from the city's existing sewage plant, the city's water supply had to be treated with ten times the normal dosage of chlorine, according to Mr. Howard.

Wm. W. Thomas photo

Modern plant to make army planes

The "Thunderbolt," the most powerful U. S. Army single-engine pursuit plane, is to be manufactured in a new $6,000,000 addition to the plant of the Republic Aviation Corp., East Farmingdale, N. Y. Designed by Albert Kahn Architects and Engineers Associates, and built by the Turner Construction Co., Republic's plant, shown above, places in operation one of the largest and most efficiently planned manufacturing units in the American aircraft industry.

The building covers an area of nearly 500,000 sq.ft. and provides more than ten acres of open floor space under one roof. The main portion of the new building, which is arranged generally for assembly purposes, has a clear height of 35 ft. above the floor level. This working area has been divided into three sections, the center one being 800 by 200 ft. with the two side areas each 800 ft. by 150 ft. in width. All of these areas are entirely free of columns or structural members.

The western end of the building, consisting of five 100-ft. wide bays has a clear story height of 20 ft., is being used for tool shops and stockrooms. In this section 50,000 sq.ft. of basement area is provided for locker rooms, toilets and fan rooms. At the east end (in foreground) a 200-ft. wide canopy door, 35 ft. high, has been provided. Provision is made for future canopy doors at the 150-ft bays where at present only a 50-ft. wide door is installed.

Five lines of 10 ft. high roof monitors run from east to west along the entire building to provide for natural lighting in the center. These monitors are so designed that at any time blackout shutters can be installed. To augment the natural light, 42 continuous rows of fluorescent fixtures 500 ft. in length and spaced 22 ft. apart are used. Each row consists of 336 forty-watt tubes giving an average intensity of 30 foot-candles and providing an even, glareless illumination.

BRIEF NEWS

EDWARD WESP, JR., senior engineering student at New York University, has been named winner of the Daniel W. Mead Prize of the American Society of Civil Engineers, according to announcement by Dean Thorndike Saville of New York University. Mr. Wesp's winning paper was entitled "Ethics of the Engineer Inspector." An award of a certificate and $50 to Mr. Wesp will be made at the annual meeting of the society in January.

MICHIGAN has enacted a comprehensive state trailer law to replace all former municipality laws, ordinances and regulations, according to the National Highway Users Conference. The new measure vests all trailer park control in the state and fixes an annual park fee of $25 and a monthly fee of $1.50 for each occupied trailer. Trailer park regulations call for an approved water supply, an adequate disposal system, fire protection, and garbage and rubbish removal facilities.

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THE STATE OF LOUISIANA is entitled to collect taxes on petroleum products used by contractors on army cantonment construction work, since the contractors are not agents or instruments of the federal government, according to ruling handed down by Louisiana State Supreme Court. The opinion reverses a ruling of the District Court at Baton Rouge, which had ordered the state collector of revenue to restore to the Standard Oil Co. of Louisiana $22,200 paid on petroleum products sold to contractors for use by them in the construction of Camps Livingston and Claiborne, near Alexandria, La. About $125,000 is involved in this and similar cases.

AS A RESULT of a successful six-year experiment in offering courses in city and regional planning as a field of undergraduate study, the graduate school at Cornell University announces that graduate students, beginning this Fall, may elect to major in this field. A degree of master in regional planning may be earned. More than six years ago the Carnegie Corporation of New York offered to support a five-year program of instruction in planning at Cornell. The result of that work is the offer of the new degree. Graduate work in planning is under the administration of Professor George H. Sabine, dean of the graduate school, Gilmore D. Clarke, professor of regional planning and dean of the college of architecture, and Thomas W. Mackesey, assistant professor of regional planning.

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Repair and maintenance priority order to be extended to construction

Builders may expect to get A-10 rating for necessary repair materials. Signed statement by official must accompany order.

An amendment to the repair and maintenance priority order by the Supply, Priorities and Allocations Board will be issued within a few days to bring construction within the scope of the order. As issued Oct. 16, the order covered all manufacturing industry as well as wholesalers, warehousers, transportation, communication, and a number of others, but did not include construction.

When the amendment comes through, construction firms will be able to apply an A-10 rating to their orders for repair, maintenance and operating supplies. Repair and maintenance supplies mean material needed to keep property and equipment in sound working order or to return it to that state. They do not cover improvements to or extensions of the equipment. Operating supplies mean "material which is essential to the operation of the producer's (i.e. the construction firm's) business and which is consumed in the course of such business, including without limitation fuel, lubricants, catalysts, and small perishable tools, provided: it shall not include any material which is physically incorporated, in whole or in part, into any product of the producer."

To use the rating, it will only be necessary to attach to each order for repair maintenance and operating supplies a statement signed by an officer of the firm as follows: "Material for maintenance, repair, or operating supplies—Rating A-10 under preference rating order P-22 as amended, with the terms of which I am familiar." Copies of all rated purchase orders must be kept for two years, segregated from other orders.

The order requires that the rating not be used unnecessarily, that producers hold their inventories of repair maintenance and operating supplies to a practical working minimum, and that—except with specific permission from OPM—they do not use more of such supplies in any quarter than during the corresponding quarter (or alternatively the average quarter) of the previous year. Those using less than $2,500 worth of such supplies during any quarter are exempt from this last restriction.

Herb Foster photo

Rainbow Bridge to be opened Nov. 1

Built to replace the 40-year-old Falls View spandrel arch that was carried away by an ice jam in 1938, a new highway bridge across the Niagara River at Niagara Falls, known as the Rainbow Bridge, will be opened to traffic Nov. 1. The new structure, which is shown on the cover of this issue and under construction above, is a 950-ft. span hingeless steel-rib arch, the world's longest bridge of this type. Two 22-ft. roadways separated by a 4-ft. mall, and a 10-ft. sidewalk on the falls side are provided by the concrete deck. The crossing was built by the Niagara Falls Bridge Commission with revenue bonds. Consulting engineers are Waddell & Hardesty, New York, and Edward P. Lupfer Corp., Buffalo, who are co-engineers on the design and construction of the bridge. R. W. Cady of the Lupfer firm was resident engineer in charge of construction. The bridge was fabricated and erected by the Bethlehem Steel Co. with E. L. Durkee as resident engineer in charge of field work on both sides. McLain Construction Co. built the American approach and Aiken & McLachlan the Canadian.

For details of the interesting cableway system used in erecting the main arch see ENR Aug. 28, 1941, p. 288.

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Water storage begun Oct. 20 at Friant Dam

The contractor at Friant Dam on the San Joaquin River in California closed off sufficient of the temporary openings in the dam on Oct. 20 to start storage of water. Now open are but two gates in the remaining temporary openings, which permit about 700 cfs. to flow through the dam. This flow will continue for about three weeks or until the water rises sufficient to flow through the higher permanent openings.

R. B. Williams, construction engineer of the project for the Bureau of Reclamation, reports that when the reservoir level reaches the permanent outlets the two small gates will be closed and the temporary openings plugged with concrete for a permanent seal.

Griffith Co. and the Bent Co. are general contractors for the project with M. H. Slocum, superintendent.

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Copper and brass prices to be frozen by OPA

Fearing that last week's order prohibiting manufacture of copper building materials after the first of the year will skyrocket the prices of the limited supplies available, the Office of Price Administration is preparing an order freezing the price levels of copper and brass building hardware. Subsequently, studies will be made to see whether prices cannot be brought well below existing levels. Ceilings will be established for other copper building materials if the prices show signs of rising. Most of these are now covered by informal OPA agreements with the producers.

Studies aimed at a reduction in the price of valves, fittings, and other foundry products have been under way for sometime and will be rushed to completion. The plan is to ask the foundries to reduce prices voluntarily, failing which ceilings will be established.

Defense housing set-up may be reorganized

Rumor suggests that Col. Fleming may succeed Carmody as administrator of the Federal Works Agency.

The unwieldly administrative structure of defense housing is due for a reorganization. Judge Samuel Rosenman, the President's personal advisor who is credited with working out the formula for SPAB, has been told to study the housing set-up. Following his usual technique, he is now engaged in interviewing all the major housing officials, getting their ideas on what changes ought to be made, and will presently synthesize them into a proposal to be presented to the President.

The organization of housing doesn't look bad on a chart, but in practice it has produced a good deal of friction and confusion. The field is divided into public housing, centered under the Federal Works Agency, private housing, and semi-public housing through RFC's Defense Homes Corp. All three are supposed to be coordinated by Charles Palmer, Coordinator of Defense Housing. Mr. Palmer has the major job of determining what housing shall be built in each of the three categories and where. He now has private housing firmly under his control through the priority system; he decides what projects shall get ratings, and it is practically impossible to build without a rating.

Federal Works Administrator Carmody has distributed the public housing phase of the program among nearly every agency of the government that knows how to build a house, including USHA, PBA, TVA, FSA, and the Navy, which also is building some civilian housing independently. In addition, Administrator Carmody has set up two new agencies attached directly to his office—the Division of Defense Housing, with prime responsibility for prefabricated construction, and the Mutual Ownership Defense Housing Division, which handles projects on the so-called "Camden Plan."

These agencies have varied in efficiency and have taken somewhat different approaches to the problems. Moreover, Administrator Carmody and Mr. Palmer have frequently not seen eye to eye. It would be hard to demonstrate that the resultant confusions have actually delayed the production of housing, but they have certainly not made it easier.

What form the pending reorganization will take is at present a subject on which it is impossible to do anything but speculate. Coordinator Palmer has consistently had the support of the President, and it is generally expected in Washington that Administrator Carmody will be shifted to some other job in the interests of harmony. One rumor has it that Col. Philip B. Fleming will be brought over from the Wage and Hour Administration to replace Administrator Carmody.

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Super highway completed at Columbus, Ohio

The four-lane super highway extending from the city of Columbus, Ohio, to that city's zoological gardens at O'Shaughnessy Dam, 16 miles north of the city, has been completed. Designated as State Route 257, the new road winds along the Scioto River and is known as the "Zoo Road." Two 20-ft. wide lanes separated by a 3-ft. raised median strip are provided.

The work just completed was started in 1940 under the direction of Robert S. Beightler, then highway director, and now major general commanding the 37th division at Camp Shelby, Miss., and completed under the direction of Hal. G. Sours, the present highway director. As engineer of division No. 6 of the state highway department, J. Perry Shumaker, supervised construction. Fritz Pyle Construction Co. was the contractor.

New priority plan effect highway construction

A special form of the P-19 proje rating form has been established for us in connection with the highway priori plan (*ENR*, Sept. 11, 1941, p. 335). Th new form, P-19e, differs from the regu lar form in several important respect In the first place, it is not used by th road contractor himself; it can only b applied by the state highway department Thus, when a contractor wants to order something that needs a rating, he send two copies of the order to the highwa department. The department then serve the rating on the supplier along with on of the copies of the purchase order.

As regards material to be incorpora ted into the construction project, th P-19e order can be extended indefinitely That is, the supplier can use it to ge the materials he needs, and so on dow the line. Orders for equipment, however cannot be extended. Therefore, it is im portant that equipment orders be place directly with the manufacturer and no with a dealer.

Unlike the regular P-19 order, P-19e is not restricted to items on the pri orities critical list.

Portable chlorinator demonstrated at New York

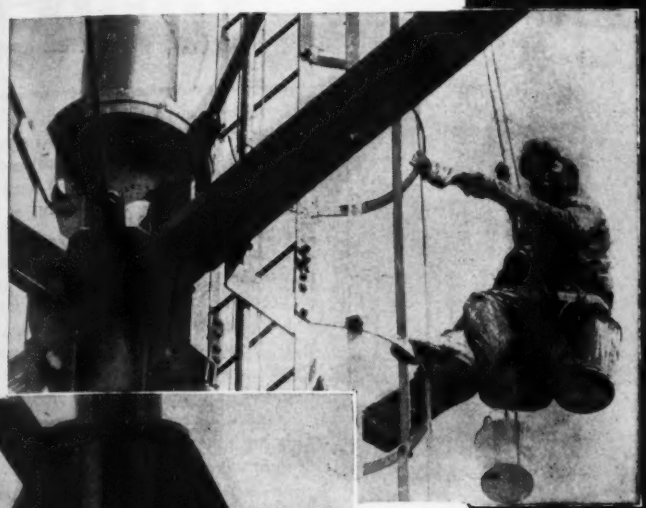
As a feature of the annual convention in New York City two weeks ago (ENR, Oct. 16, 1941, page 527) of the Federation of Sewage Works Associations, a new mobile chlorinator for emergency service was demonstrated in Battery Park. The two-wheel trailer unit, which weighs about one ton, has been developed by Wallace & Tiernan Co., Inc., Newark. The unit has two tanks, which contain a total of 300 lb. of chlorine, or a quantity estimated as sufficient for purifying a total of about 25,000,000 gallons of water.

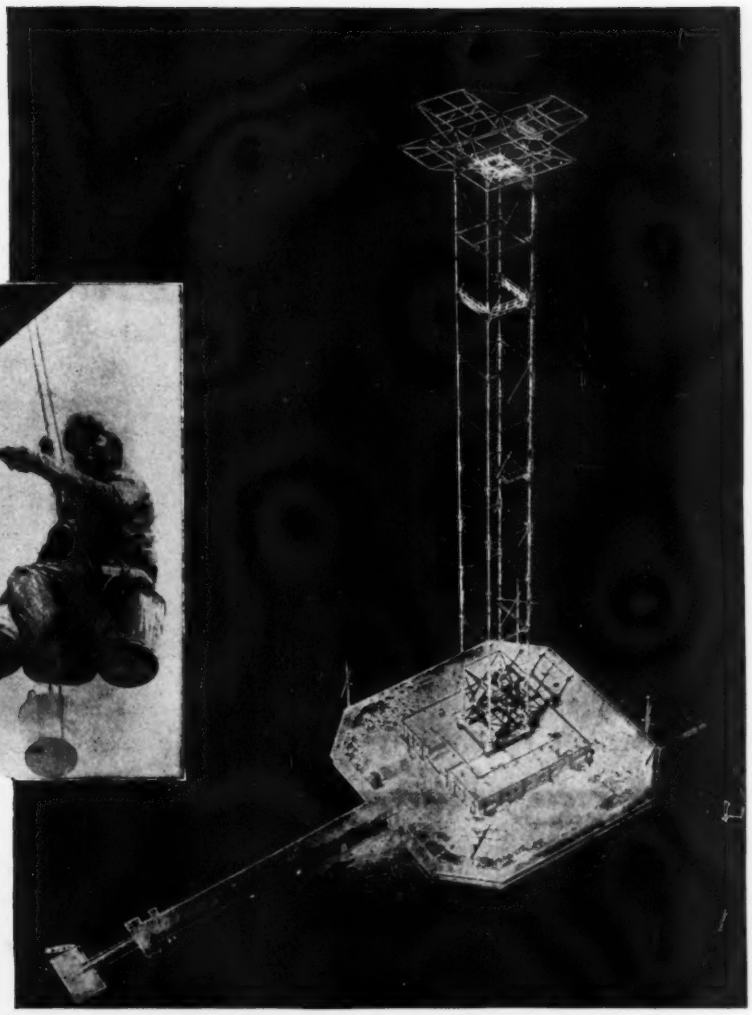
Special value of the equipment would be its use where water mains are broken by either bombing or other war measures. The unit in action is powered by 5-hp. gasoline engine mounted on the trailer. A self-priming pump will deliver required injection water at sufficient pressure to apply 100 lb. of chlorine per day against a maximum pressure of 100 psi.

The chlorinator is 5 ft. wide, 10 ft. long and 5 ft. 7 in. high.

WABC builds an island transmitter

View below shows joint and bracing details for one of the four tower columns.





New transmitter station above is located on an extremely small island in Long Island Sound.

Construction details at tower base are illustrated at the left.

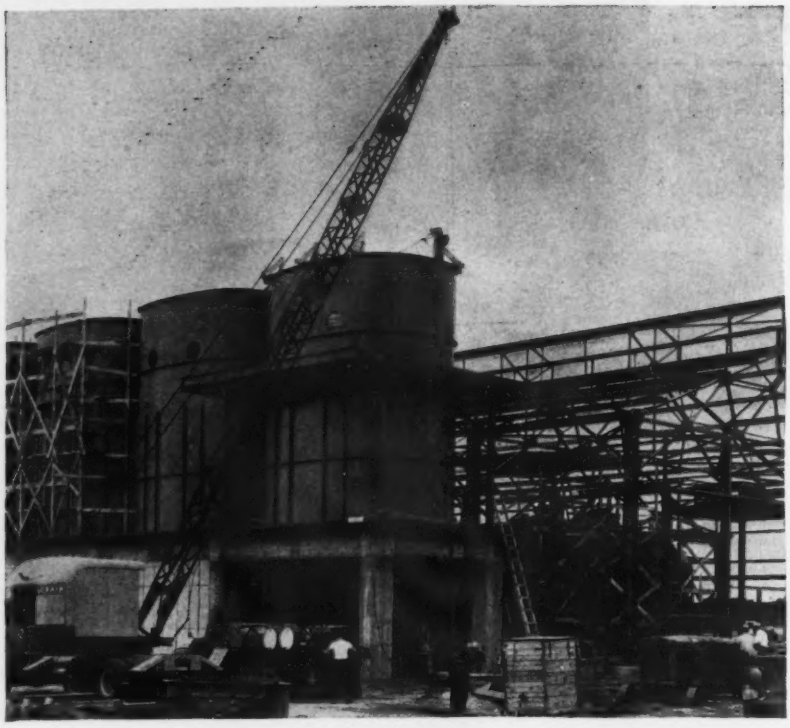
Placed in operation Oct. 18 on Columbia Island, formerly Little Pea Island, in Long Island Sound, one mile off New Rochelle, N. Y. shore, was a new 50,000-watt transmitter for radio station WABC of the Columbia Broadcasting Co. The new station, built at a cost of $600,000 to replace a plant at Wayne, N. J., is believed to be the first station of its type constructed on such a small island. Columbia Island originally presenting less than a 1,000 sq.ft. of area at high tide.

First major activity in building the new station was construction of a 16-ft. high, 600-ft. long reinforced-concrete seawall to surround the site. This required 2,000 cu. yd. of concrete, which was supplied from a mixer located on a temporary pier extending outward from the island but clear of the building site. The seawall has a curved outer face such that the breakers are thrown back against the oncoming waves.

While the seawall was under construction, four holes were blasted into the rocky island to make possible construction of four 21½-ft. square, 137-cu. yd. blocks of reinforced concrete for individual footings for the four columns of the 410-ft. high steel tower. With the seawall and foundations completed, the inclosed area was filled with earth and erection of the 300 tons of steel required for the tower started. For the latter work a jin pole was used. The tower's four columns are 18 inches in diameter at the bottom, reducing gradually to 10 inches at the top. Joints in the columns are found just above each level of the horizontal bracing, which is every 35 ft. An accompanying photo shows the type of joint used for the tower columns, which are all vertical. To make the superstructure more noticeable to aviators, approximately the first 20 ft. of the tower's height is painted orange, the next band, also about 20 ft., is painted white, and then the colors are alternated in a similar way for the remaining height.

The photos show how the base for the steel tower is built up through the transmitter building with the two structures independent of each other. The photos also show how the tower is insulated from its base. The 75-ft. square, one-story transmitter building was started before the tower was complete. This building is air conditioned with water supplied by a 920-ft. deep well on the island that also serves as a water supply.

W. J. Barney Corp., New York, was general contractor for the work, which was started in August, 1940, and Lockwood & Greene, New York, were engineers. C. R. Jacobs was in charge of construction for the Columbia Broadcasting Co. and A. T. Glassett for the Barney firm. W. J. Heiser represented the consulting engineers on the work.



Production starts Nov. 15 at Sandusky ordnance works

Completion date for the first production line at the TNT and DNT plant being built at the Plum Brook Ordnance Works, Sandusky, Ohio by the War Department has been set as Nov. 15. Although priorities may require some adjustment of this date, army officials are holding to the original schedule. There are now about 4,000 employees at work on the job and this force is expected to be necessary for some time.

Above is shown a recent construction view of the sulphuric acid concentrator building and construction of five precipitation tanks, four of which are shown. Each tank is 25 ft. high and about 15 ft. in diameter. It is lined with asbestos paper, 10-lb. lead, and one layer of acid-resisting brick. The tanks are elevated in order that the precipitated acid may flow by gravity from them into the nearby building, where the liquid will be used.

E. B. Badger & Sons, Boston, is the general contractor for the plant, which will be operated by the Trojan Powder Co., Allentown, Pa. Capt. Frank A. Ray, constructing quartermaster at Plum Brook, is in charge for the War Department.

Salvaging Tacoma Bridge Steel raises big problem

The report that the Washington Toll Bridge Authority has petitioned the U. S. Engineer office in that district for permission to drop the damaged cables of the Tacoma Narrows Bridge into Puget Sound has brought up the question of salvaging steel from the wreck of this unfortunate structure. Now that local sentiment is well crystallized in favor of a wider, heavier bridge, there appears to be no alternative to removal of all that remains of the old structure above the concrete piers.

The cables weigh almost 7½ million lb. and the steel in the two towers somewhat exceeds this weight (about 7,700,000 lb.). By reason of the zinc used in galvanizing, the wires that make up the cables are not desirable as scrap for remelting. Hence it is believed that their cost of 16c. per pound, in place, may well be a total loss. The deep waters of the Sound have been suggested as the most economical place to dispose of them.

No decision about the disposal of steel in the towers has been announced. Findings of the Cone-Svedrup-Donaldson report have not yet been made public. The towers, some 500 ft. in height, would yield scrap worth about $15 per ton but it is believed that the cost of dismantling would considerably exceed that figure.

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Lack of pipe limits Baltimore water service

The city of Baltimore water department is refusing to accept applications for new service connections because of the difficulty in obtaining cast iron pipe in the 6- and 8-in. sizes. In the last month more than 500 applications have been refused, according to Leon Small, water engineer of that city. Awaiting installation are 1,136 service requests that had been accepted prior to the curtailment of pipe deliveries because of priority restrictions.

WASHINGTON HIGHLIGHTS

THE DECENTRALIZED ADMINISTRATION set up last month for the issuance of housing priorities is considered in Washington as working well—to the extent at least that no complaints are coming in. Ratings are being issued at a good rate, and builders with ratings are able to get reasonably prompt deliveries. Ratings being issued ranging from A-2 to A-10. The A-2 rating is being used for projects which were under construction Sept. 1 and are located in cities where the housing situation is very tight; in other cities, an A-4 is being given to projects underway on that date. New projects in critical cities get an A-6 rating if they are for rent and an A-7 if for sale. In non-critical cities, new rental projects rate A-9 and new sale projects A-10. To date, it does not make much difference what rating is issued, since good deliveries are being obtained with an A-10. It may make a difference as the situation gets tighter.

TRANSFER of Army construction to the Corps of Engineers has been approved by the Senate and now awaits House action.

ALTHOUGH the plan to double or triple tank production (*ENR*, Oct. 2, 1941, p. 463) is one of the most sweeping extensions of the arms program now underway, it is expected to involve very little new plant construction. No more great tank arsenals such as the one Chrysler is operating are planned. A few assembly sheds with runways for heavy cranes will be built, but the bulk of the expansion is to be achieved by diverting present auto production facilities to manufacture of tank parts.

IMMEDIATE EXPANSION of the Civil Aeronautics Authority's program of airport construction and improvement (*ENR*, July 3, p. 7) is being studied by the CAA and the War Department. There is no intimation as yet as to how much additional work might be involved. The CAA's present two-year program, now in its second year, covers about 400 airfields. During fiscal 1941, CAA spent $40,000,000 and WPA $9,000,000. This year CAA has been provided with $95,000,000 and $40,000,000 of WPA funds have also been allocated to the program.

WPA not barred from defense work according to Hunter claim

Takes issue with OPM as to content of memorandum supplementing labor stabilization agreement on Army and Navy work.

The widespread impression that the use of WPA labor on defense building jobs was barred by a supplementary memorandum attached to the stabilization agreement between governmental defense agencies and the AFL building trades, signed last July (*ENR*, July 31, p. 139), is based upon misleading information, Howard O. Hunter, head of the Work Projects Administration, charges in a recent announcement. Mr. Hunter states that the supplementary memorandum that was attached to the agreement as given out by the OPM at the time it was first announced as having been approved was not the supplementary memorandum actually approved by the War Department, the Navy Department and the Works Projects Administration. The supplementary memorandum, as contained in the official OPM release, read as follows:

> It was the general consensus of opinion of the conferees on construction labor that Work Projects Administration labor on construction projects was detrimental to peace and harmony in labor relations on the projects and the conferees submit the matter to the Office of Production Management with the request that the subject be studied in the light of the existing law and administrative orders. To the end of harmonizing and expediting the defense construction program it is urgently requested that legislative and administrative action be immediately sought which will eliminate Work Projects Administration labor on projects upon which are employed members of organizations represented by labor signatories hereto.

According to Mr. Hunter, "as a result of conferences held on July 9 and 10, to discuss the subject of the elimination of WPA labor from such projects, and attended by representatives of the Army, Navy, the Work Projects Administration and the AFL Building and Construction Trades Department, there was unanimously adopted a 'substitute memorandum' which read as follows:

> When the construction of a building by the War or Navy Department is contemplated to be done by contract, it is the opinion of the conferees that the contract should include the construction of the building in its entirety.

"It is this memorandum," Mr. Hunter states, "which should have been published in connection with the stabilization agreement instead of the statement opposing the use of WPA labor, which was not approved by the agencies involved."

In thus formally taking issue with the OPM as to the accuracy of its announcement concerning the stabilization agreement of July 24, Mr. Hunter raises a new question as to whether or not there were unwritten understandings between at least some of the government negotiators and the AFL representatives. A similar question was raised recently in connection with the order of Sidney Hillman of the OPM to John Carmody of the FWA to hold up award of a contract on the Currier housing bid at Detroit (*ENR*, Oct. 9, p. 473 and Oct. 16, p. 539). Rumors were current in Washington at the time the stabilization agreement was published that the WPA had been double-crossed by some last-minute changes in the supplementary memorandum, but the WPA made no public protest at that time. Similarly it was rumored that there was a tacit understanding between OPM representatives and the AFL that while the agreement was in effect, no defense building contract would go to others than employers of members of the AFL Building and Construction Trades Division.

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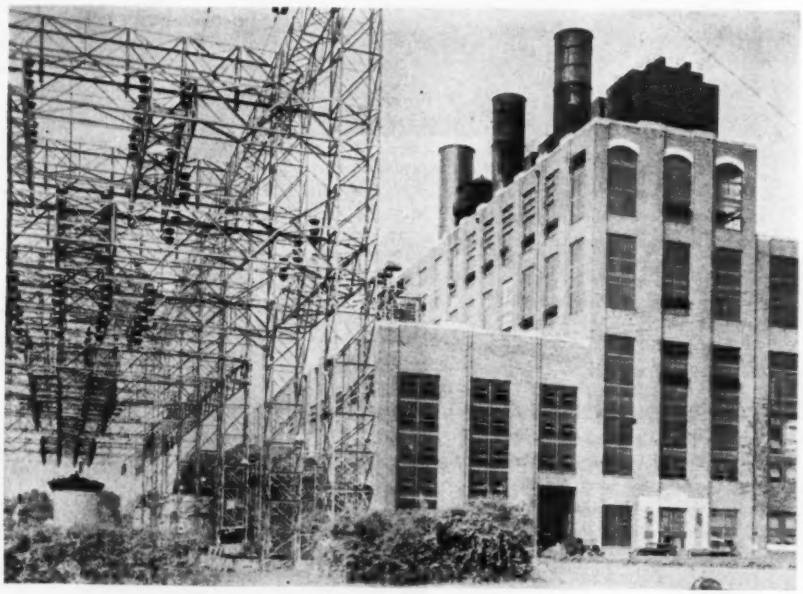
Bids to be called for Rockland Dam in Texas

The Lower Neches Valley Authority, Port Arthur, Texas, through its president, A. N. Peckham, of that city, advises that surveys and design work in connection with the Rockland Dam project will be completed shortly—with the possibility that bids may be called early in December. The project calls for construction of an earth dam with concrete spillway across the Neches River above Rockland. Ultimately a gravity canal from the dam to Jefferson County will be constructed.

Additional information about the work may be obtained from the authority or from the engineers for the project, J. B. Converse & Co., Port Arthur, Texas.



Addition makes this Georgia's largest power plant

Recently completed was a 1,500,000 kw-hr. per day addition at Georgia Power Company's Plant Atkinson, a steam-electric generating plant on the Chattahoochee River near Atlanta, Ga. This makes the plant, which now has a total capacity of 3,000,000 kw.-hr., the largest power plant in the state of Georgia.

The older unit, completed in 1930, is on the near side of the plant, while the new construction is at the rear. The new addition necessitated construction of a new boiler room, turbine room, and condenser pit, and installation of a third steam generator or boiler rated at 650,000 lb. of steam hourly at 460 lb. pressure and 750 deg. total temperature when leaving the superheater. The new turbo-generator installed is rated at 66,666 kva. or 60,000 kw. at 90 percent power factor and it is designed for 425-lb. steam pressure and a 750-deg. steam temperature at the main inlet valve. It is interesting to note that the new unit with but the one steam generator equals the capacity of the two older units which were two steam generators, each requiring 450,000 lb. of steam hourly.

Combustion Engineering Co., Inc., New York, was general contractor for the new work. Consulting engineers on the project were William P. Hammond, general engineer, and J. M. Oliver, operating manager of the Georgia Power Co.; and H. J. Scholz, electrical engineer, Commonwealth & Southern Corp.

MEN AT WORK

G. F. HARLEY (referring to map at right), regional director, Region 8, Defense Public Works Division, FWA, and UEL STEPHENS, assistant regional director for Region 8, are busy men. Up until Oct. 16 their region, which consists of Louisiana and Texas with headquarters at Ft. Worth, had received some 424 project applications representing a total estimated cost of $128,900,000.

A famous father-son combination attended the A. G. C. board meeting in Detroit recently. WILBUR F. CREIGHTON, SR. (left above) beams up at his son, W. F. JR., who beams right back. They're part of the Foster-Creighton Co., Nashville.

Area engineer for the U. S. E neers at the Westover Field Arm base at Chicopee Falls, Mass. is C H. LOVEJOY (left). He has ch of extensive work at the huge bo airfield, which will have several ways more than 1½ miles long.

W. J. WARD (right), who has built many bridges in the West, moved to Hartford, Conn. to direct operations for the American Bridge Co. in erecting the steel for the Connecticut River Bridge. The crossing will include a 300-ft. plate girder span.

As assistant constructing quartermaster and engi officer at the Twin City ordnance plant near Brighton, Minn., MAJ. JOHN C. PRITCHARD (abo 60, nation's oldest reserve officer in active duty plenty busy these days. He served overseas du 1914-1918 and was public utilities director for the of St. Louis from 1927 to 1933, when he became a ciated with Russell & Axon, Inc., consultants of St. Lo

A Navy warehouse and mold loft at San Pedro, Calif., is be put up more quickly and is costing less because the conc framing supporting the 93,500-sq.ft. second floor requires no fo work—the framing goes in as precast units, some of which we more than 5,000 lb. Original methods in making and handling precast unit were developed by the Wailes-Bageman Co. w holds the contract for fabrication and erection of this part the structure. C. D. WAILES and F. J. BAGEMAN (wearing co confer with blueprints resting on a precast strut-beam.

MEN AND JOBS

Charles E. Neville, assistant engineer of Lewis County, Wash., for 18 years, has been promoted to county engineer to succeed **Burwell Bantz,** who resigned to accept a position as state highway director. **R. L. Schuster,** another employee of the engineering department, will be made county assistant engineer, reporting to Mr. Neville.

Capt. William C. Ready, of Arlington and Lowell, Mass., has been appointed deputy zone constructing quartermaster for Zone One, which includes all the New England States, assisting **Col. S. W. McIlwain,** chief of all quartermaster construction in Zone One. Capt. Ready has been active in army construction in New England for the past eleven years. As supervising engineer and superintendent of construction of the First Corps Area, he supervised the building of 230 CCC camps. In 1940 he was made constructing quartermaster of Fort Devens. In April, 1941, he was made executive officer of Zone One of the recently organized construction division zones; **Capt. Harolde T. Loftin,** of Houston, Tex., his former assistant, will succeed him in this capacity.

CAPT. W. C. READY

Paul Vincent, civil engineer, has been appointed chief engineer of works in the Department of Colonization of the Province of Quebec, Mr. Vincent, a graduate of Ecole Polytechnique, Montreal, has worked as district engineer for the roads and bridges division.

J. E. Gill has new duties as resident engineer on the construction of the dam at Rapid No. 7 near Cadillac, Quebec for the Quebec Streams Commission.

Roy D. Bane, assistant superintendent of the Warren Sheet & Tin unit of Republic Steel Corp., has been appointed superintendent of the sheet and tin mills of the Warren and Niles Republic plants. Mr. Bane replaced **G. N. Harmon,** who recently was made assistant district manager.

James A. Westbrook, sanitary engineer for the Orange-Person-Chatham Health Department for the past four years, with headquarters at Chapel Hill, N. C., has just been given a leave of absence in order that he may become sanitary engineer in connection with the construction of the Cherry Point marine base near New Bern, N. C. **F. B. Brendle,** who has been working with the tri-county department at Pittsboro, N. C., will take over Mr. Westbrook's present duties.

C. B. McMillan, civil engineering graduate in 1936 from Queen's University, is now employed with the Canadian National Railways at Montreal. He has worked for the Ontario Paper Co. and the Aluminum Co. of Canada.

Lynn F. Hummel, assistant professor of general engineering at Iowa State College, has left for Fort Monmouth, N. J., on active army duty as a first lieutenant in the signal corps. **John E. Devine,** an Iowa State graduate and Chicago employe of the Commonwealth Edison Co., has been appointed to replace Mr. Hummel at the college.

Herman F. Lame, consulting engineer of Albany, N. Y., and formerly chairman of the legislative committee for the New York State Society of Professional Engineers, is now chief of the plant engineering section for the U. S. Maritime Commission, with offices in the Department of Commerce Building, Washington, D. C.

Martin E. Kelly, appointed state director of the Public Work Reserve program in Montana, has opened an office in Helena.

M. T. Ulteig, chief engineer for the North Dakota public service commission, has resigned to accept a position with the Rural Electrification Administration.

Adolph Lundin, highway contractor of Mankato, Minn., has accepted a position as supervisor on the $9,500,000 defense base project at Antigua, in the West Indies, now being constructed by S. J. Groves & Sons Co., of Minneapolis.

Arthur B. Morrill, now engineer of sewage treatment at Detroit, will leave San Francisco by air Nov. 18 to assist in the construction of a railroad in southwestern China. He will be one of sixteen members of a medical commission of the U. S. Public Health Service to the Burma-Yunnan R.R., a 600-mile line being built by the Chinese government. Under a reserve commission as senior sanitary engineer in the USPHS, Mr. Morrill will supervise camp sanitation. Soon after graduation from M.I.T. in 1909, he spent three years as a professor at the Chinese government Pei Yang University. **Dr. V. H. Haas,** surgeon, USPHS, is chief of the commission.

A. B. MORRILL

Arthur H. Ebeling has been elected president of the Iowa state board of architectural examiners. **H. W. Hartupee** was named vice president and **William L. Perkins,** secretary and treasurer.

George O. Sanford, general supervisor of operation and maintenance, Bureau of Reclamation, Denver, has retired to Marshfield, Mass. Mr. Sanford was graduated from Worcester Polytechnic Institute in 1895. For ten years thereafter he was with the Metropolitan Water Board of Massachusetts on construction of the Wachusett Reservoir and the Weston Aqueduct. In 1905 he joined the Bureau of Reclamation as project engineer of the North Dakota pumping project. He was, successively, superintendent on the Milk River, Shoshone and Sun River projects in Montana and Wyoming; in 1930 he was called to the Washington office, where he has served as reclamation economist, chief of the engineering division, and general supervisor of operation and maintenance. Mr. Sanford is a member of several engineering societies, and an honorary member of Theta Tau engineering fraternity of George Washington University.

G. O. SANFORD

Stanley Pinel, director of research for the American Public Works Association, resigned on Oct. 1 to take a post with the Federal Works Agency in Washington. He is serving as liaison man between the Defense Public Works organization and the office of Executive Assistant to the Administrator.

Herbert J. Baker has discontinued private practice as inspecting engineer for the duration of the national emergency and has accepted appointment as supervising engineer with the Reconstruction Finance Corporation. He is now engaged as supervising engineer on construction of the Nassau, Long Island, plant, Sperry Gyroscope Company, Inc.

Matt Koski, chief engineer of University of Minnesota properties, has been granted a leave of absence to permit him to undertake duties as construction engineer for the boiler house and power plant at the Des Moines, Iowa, ordnance plant.

Scott P. Hart, materials engineer for Montana state highway department, recently was ordered to active duty at Fort Ord, Calif. He is a major in the field artillery.

Steel shapes to be restricted

An industry-wide movement for the restriction of structural steel shapes was announced Oct. 27 by the Office of Production Management. This action was taken in the form of a request to producers by A. D. Whiteside, chief of OPM's iron and steel section, after consultation with Army, Navy, Maritime Commission and other defense agency officials, as well as architects, engineers and designers.

Purpose of the request is to avoid tieing up mills with small miscellaneous rollings for odd sized beams, channels and angles frequently ordered. All shapes regularly used in ship, car and building construction are retained.

The number of angle shapes will be reduced 50 percent by the action, and beams, channels and other shapes ordinarily used in various types of steel construction almost as much. The request will become effective Feb. 1, 1942, allowing time for producers to get rid of present stocks of shapes affected by the order. All producers are requested to extend notification to their customers. The list of shapes to be available after Feb. 1, 1942, follows:

Nominal Dimensions	Weight per Foot					
Wide Flange Beams						
36 x 16½	300	280	260	240	230	
36 x 12	194	182	170	160	150	
33 x 15¾	220	200				
33 x 11½	152	141	132	125		
30 x 15	210	190	172			
30 x 10½	124	116	108			
27 x 14	163	145				
27 x 10	106	98	91			
24 x 14	150	130				
24 x 12	120	100				
24 x 9	87	80	74			
21 x 13	132	112				
21 x 9	96	82				
21 x 8¼	73	68	63	59		
18 x 11¾	114	105	96			
18 x 8¾	85	77	70	64		
18 x 7½	55	50				
16 x 11½	96	88				
16 x 8½	78	71	64	58		
16 x 7	50	45	40	36		
14 x 16	426	398	370	342	320	
	314	287	264	246	228	
	211	193	176	158	142	
14 x 14½	136	119	103	95	87	
14 x 12	84	78				
14 x 10	74	68	61			
14 x 8	53	48	43			
14 x 6¾	38	34	30			
12 x 12	190	161	133	106	92	
	79	72	65			
12 x 10	58	53				
12 x 8	45	40				
12 x 6½	36	28	25			
10 x 10	112	100	89	77	66	
	54	49				
10 x 8	41	33				
10 x 5¾	26	21				
8 x 8	67	58	48	40	35	31
8 x 6½	27	24				
8 x 5¼	21	17				
Light Beams						
12 x 4	22	19	16½			
10 x 4	19	17	15			
8 x 4	15	13				
6 x 4	16	12				

Nominal Dimensions	Weight per Foot				
Joists					
12 x 4	14				
10 x 4	11½				
8 x 4	10				
6 x 4	8½				
***Junior Beams**					
12 x 3	11.8				
11 x 2⅞	10.3				
10 x 2¾	9.0				
9 x 2⅝	7.5				
8 x 2¼	6.5				
7 x 2⅛	5.5				
6 x 1⅞	4.4				
* Rolled by Jones & Laughlin Steel Corp.					
Stanchions					
6 x 6	27½	25	22½	20	18
	15½				
5 x 5	18½	16	13½		
4 x 4	13	10			
H-Beams					
8 x 8	34.3				
6 x 6	25				
6 x 6	20				
5 x 5	18.9				
Subway Columns					
5¾ x 9½	40				
Bearing Piles					
14 x 14½	117	102	89	73	
12 x 12	74	53			
10 x 10	57	42			
8 x 8	36				
Standard Beams					
24 x 7⅞	105.9				
24 x 7	100	90	79.9		
20 x 7	95	85			
20 x 6¼	75	65.4			
18 x 6	54.7				
15 x 5½	50	42.9			
12 x 5¼	50	40.8			
12 x 5	31.8	35			
10 x 4⅝	35	25.4			
8 x 4	23	18.4			
7 x 3⅝	15.3				
6 x 3⅜	17.25	12.5			
5 x 3	10				
4 x 2⅝	9.5	7.7			
3 x 2⅜	7.5	5.7			
Standard Channels					
18 x 4	58	51.9	45.8	42.7	
15 x 3⅜	55	50	40	33.9	
12 x 3	30	25	20.7		
10 x 2⅝	30	25	20	15.3	
9 x 2½	20	15	13.4		
8 x 2¼	18.75	13.75	11.5		
7 x 2	14.75	12.25	9.8		
6 x 2	15.5	10.5	8.2		
5 x 1¾	9	6.7			
4 x 1⅝	7.25	6.25	5.4		
3 x 1½	6	5	4.1		
Car Building Channels					
13 x 4	50	40	35	31.8	
12 x 4	50	45	40	35	
4 x 2½	13.8				
3 x 1⅞	7.1				
Ship Building Channels					
12 x 3½	37	32.9	30.9		
10 x 4	41.1	33.6	28.5		
10 x 3½	28.3	24.9			
10 x 3½	25.3	21.9			
9 x 3½	25.4	23.9			
8 x 3½	22.8	21.4			
8 x 3	19.3	18.7			
7 x 3½	22.7	19.1			
6 x 3½	18				
6 x 3½	15.3				
6 x 3	16.3	15.1			
6 x 2½	12				
7 x 4	18.8				
7 x 3	17.6				
***Light Weight Channels**					
12 x 1½	10.6				
10 x 1½	8.4				
10 x 1⅛	6.5				
* Rolled by Jones & Laughlin Steel Corp.					

Nominal Dimensions	Gauges					
Equal Angles						
8 x 8	1⅛	1	[illegible]	[illegible]	[illegible]	[illegible]
6 x 6	1	⅞	[illegible]	[illegible]	[illegible]	[illegible]
5 x 5	⅞	¾	[illegible]	[illegible]	½	[illegible]
4 x 4	¾	⅝	[illegible]	[illegible]	[illegible]	[illegible]
3½ x 3½	⅝	½	[illegible]	[illegible]	[illegible]	[illegible]
3 x 3	½	⅜	[illegible]	[illegible]	[illegible]	
2½ x 2½	½	⅜	[illegible]	[illegible]	[illegible]	
2 x 2	⅜	[illegible]	[illegible]	[illegible]		
Unequal Angles						
8 x 6	1⅛	1	⅞	¾	[illegible]	[illegible]
8 x 4	1	⅞	¾	[illegible]	½	[illegible]
7 x 4	⅞	¾	[illegible]	[illegible]	[illegible]	[illegible]
6 x 4	⅞	¾	[illegible]	½	[illegible]	[illegible]
5 x 3½	¾	⅝	½	[illegible]	[illegible]	
4 x 3½	⅝	½	⅜	[illegible]	[illegible]	
4 x 3	⅝	½	⅜	[illegible]	[illegible]	
3½ x 3	⅝	½	⅜	[illegible]	[illegible]	
3½ x 2½	½	⅜	[illegible]	[illegible]		
3 x 2½	½	⅜	[illegible]	[illegible]		
3 x 2	½	⅜	[illegible]	[illegible]	[illegible]	
2½ x 2	⅜	[illegible]	[illegible]	[illegible]		
2½ x 1½	[illegible]	[illegible]	[illegible]			

Nominal Dimensions	Weight per Foot			
Ship Building Bulb Angles				
10 x 3½	32.3	29.9	27.2	24
9 x 3½	23.8	21.6	19.4	
8 x 3½	24.3	20	16	
7 x 3½	21.1	17.1	13.6	
6 x 3½	17.4	13.9	10.7	
5 x 2½	9.8	7.3		
3 x 2	3.8			
Car Building Bulb Angles				
5 x 4½	19.1			
5 x 3½	13			
4 x 3½	14.3			
4 x 3½	11.9			
Zees				
6⅛ x 3⅝ x ½	21.1			
6 x 3½ x ⅜	15.7			
5 x 3¼ x ½	17.9			
5⅛ x 3⅜ x [illegible]	16.4			
5 [illegible] x 3 [illegible] x ⅜	14.0			
5 x 3¼ x [illegible]	11.6			
4 [illegible] x 3⅛ x ½	15.9			
4⅛ x 3 [illegible] x ⅜	12.5			
4 [illegible] x 3⅛ x [illegible]	10.3			
4 x 3 [illegible] x ¼	8.2			
3 x 2 [illegible] x ½	12.6			
3 x 2 [illegible] x ⅜	9.8			
3 x 2 [illegible] x ¼	6.7			
Equal Tees*				
4 x 4 x ½	13.5			
3 x 3 x ⅜	7.8			
3 x 3 x [illegible]	6.7			
2½ x 2½ x ⅜	6.4			
2½ x 2½ x [illegible]	5.5			
2½ x 2½ x ¼	4.6			
2¼ x 2¼ x ¼	4.1			
2 x 2 x [illegible]	4.3			
2 x 2 x ¼	3.56			
*Any Standard or Wide Flange Beams 6 inches [illegible] over in depth can be split to form Tees.				
Unequal Tees*				
5 x 3⅛ x ½ (fl) x [illegible] (st)	13.6			
5 x 3 x ⅜ (fl) x [illegible] (st)	11.5			
4 x 4½ x ⅜	11.2			
4 x 3 x ⅜	9.2			
4 x 2½ x ⅜	8.5			
3 x 2½ x [illegible]	6.1			
* See note above				
Misc. Car Bldg. Sections				
Center Sill Section	12 x 3¼ — 7 x [illegible]			
" " "	12 [illegible] x 6 [illegible] — 4 [illegible] x [illegible]			
	12⅞ x 6 [illegible] — 4 x [illegible]			
	12 [illegible] x 6 [illegible] — 3 [illegible] x [illegible]			
W Side Plate Sect.	7 [illegible] x ¼			
W Side Plate Sect.	3 x [illegible]			
W Side Plate Sect.	3⅜ x ¼			

Barge builder to get three percent fee

It was incorrectly reported in *EN[illegible]* October 23 that contractors on the Mar[illegible]time Commission's concrete barges w[illegible] receive a fee of 15 percent of the es[illegible]mated cost. The fee will be three perc[illegible]

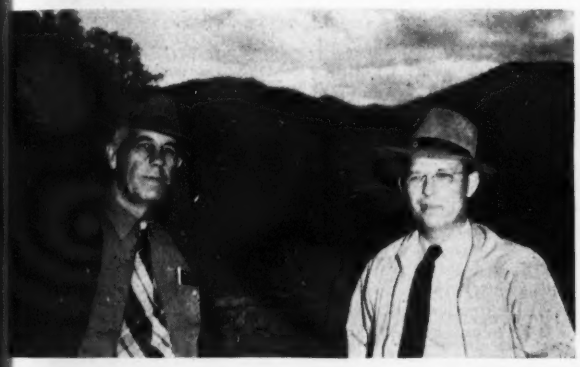
In order to be present at the dedication, C. R. SHINN, vice president of Morrison-Knudson, general contractors for the dam, traveled by airplane all the way from Alaska to North Carolina. Mr. Shinn was in charge of construction for his firm.

At dedication of

GLENVILLE DAM

Oct. 13 the Aluminum Co. of America completed and turned over to its operating subsidiary, Nantahala Power & Light Co., the 27,000 kva. Glenville development in western North Carolina. Some of the guests at the starting ceremonies are shown here.

Glenville Dam is a rock faced earthfill structure 150 ft. high which required 1,300,000 yd. of material and is capable of storing 68,000 acre-ft. of water. Head of 1,215 ft., highest east of the Rockies, is attained by 13,000 ft. of tunnel and 3,000 ft. of pressure conduit leading to a powerhouse some distance downstream. A double impulse wheel, operating under the highest head, for this type turbine in this country, develops 30,000 hp. Two 10-in. jets direct a maximum of 270 cfs. against the bottom of the wheel. Design and construction of this dam and nearby Nantahala Dam, both on tributaries of the Little Tennessee River, was supervised by James P. Growdon, chief hydraulic engineer of Alcoa. Operation will be under direction of J. E. S. Thorpe of Nantahala P. & L. Co. but water use will be integrated with the entire Tennessee River system to produce maximum power, much of which will go to Alcoa's Maryville, Tenn., plant. Morrison-Knudson Co., Boise, Idaho, were general contractors.



Companion project to Glenville is Nantahala Dam, a 250-ft. high ock fill structure with rock protected earth blanket. On this project EO. R. PUTNAM (left), is general superintendent for Utah Con-truction Co., contractor, and S. E. BITTNER is resident engineer for the luminum Co. Mr. Bittner was resident engineer at Glenville Dam during e early stages of that work.

As a representative of TVA's project planning division, J. S. BOWMAN (left) gets data on a fan used as a dampening brake on gate closing equipment from LEE GREENLEAF, former TVA employee, but now resident engineer on the Glenville project for the Aluminum Company.

D. J. BLEIFUSS (left), principal as-stant hydraulic engineer for the luminum Co. of America, gives ALDO G. BOWMAN, editor of NR, details of the Glenville develop-nt.

Tennessee Valley Authority representatives at the dedication exercises included the group above: They are, left to right, JAMES B. HAYS, construction engineer at TVA's Kentucky Dam, and a former Alcoa dam builder; JAMES P. POPE, TVA director; and ROBERT R. MONROE, assistant chief engineer of the Authority.

A.E.R.A. honors Talbot for track research work

A bronze tablet, putting into imperishable form an expression of its appreciation of the outstanding work performed for the association by Arthur Newell Talbot, professor emeritus of the University of Illinois, was presented to the university on Oct. 21 by the American Railway Engineering Association. The tablet, which is illustrated above, is to be put in the university's laboratory that bears Doctor Talbot's name.

Retirement of Doctor Talbot as chairman of the association's special committee on stresses in railroad tracks, after nearly thirty years in that capacity, was announced at the annual meeting of the association held in Chicago last March. At that time it was stated that the association was planning to give expression to its appreciation of Doctor Talbot's work in some permanent form, not yet determined.

The presentation of the tablet was made by F. L. C. Bond, president of the A.E.R.A. and the tablet was accepted for the university by Dean Melvin L. Enger of the College of Engineering. A tribute to Doctor Talbot was paid by H. R. Safford, executive secretary of the Missouri Pacific Lines, and the ceremony concluded with a response from Doctor Talbot.

Birmingham to vote on big water bond issue

The Birmingham, Ala. city commission has called a municipal election for Dec. 15 to vote on a $4,250,000 bond issue, which would be used to finance the Birmingham industrial water supply system and to make extensions to the city's water plant. The city now owes $4,120,000 on the industrial system and it is proposed to refinance this debt with new bonds calling for a 2½ percent interest rate.

The remaining $130,000 would be used to provide necessary booster pumping equipment to take care of increased demands for industrial water.

JOBS OF THE WEEK

ORDNANCE PLANT, Choteau, Okla.
W. R. Grimshaw Co., Tulsa, has been awarded contract for constructing a smokeless powder plant, at Oklahoma Ordnance Works, by War Department, Washington, D. C. at estimated cost of $37,000,000. E. I. duPont de Nemours & Co., Wilmington, Del., received a contract in September for engineering and architectural services, constructing equipment and training personnel and operating plant at $84,235,594.

DRY DOCK, Morgan City, La.
Chicago Bridge & Iron Co., Chicago, Ill., has been awarded contract for an 18,000-ton steel floating dry dock by Bureau of Yards & Docks, Navy Department, Washington, D. C. Estimated cost is $2,234,700.

GRANBY DAM, Colorado.
Peter Kiewit Sons Co., George W. Condon Co., W. E. Callahan Construction Co. and Gunther & Shirley, Los Angeles, Calif. were lowest bidders for constructing Granby Dam and dikes when U. S. Bureau of Reclamation, Denver, Colo. took bids October 20. The lowest bid was $5,133,837.

DRY DOCK and FACILITIES, Fairfield, Md.
Dravo Corp., Pittsburgh, Pa. will build dry dock and facilities for Navy Department at Maryland Dry Dock Co., plant, Fairfield, Md. Estimated cost is $20,000,000. J. E. Greiner Co., Baltimore, Md., is engineer.

BREAKWATER, Port Angeles, Calif.
Guy F. Atkinson Co., San Francisco, Calif. and Kern & Kibbe, Portland, Ore. have been award contract to construct breakwater at Neah Bay, near here by U. S. Engineers, Seattle, at a cost of $1,696,800.

FLOATING DRY DOCKS, Hoboken, N. J.
Foundation Co., New York, N. Y. has been awarded contract for constructing two floating dry docks for Navy by Bureau of Yards & Docks, Washington, D. C. Estimated cost is $3,500,000. Frederick R. Harris, Inc., New York, is engineer.

ORDNANCE MACHINE SHOP BUILDING, Mare Island, Calif.
Barret & Hilp, San Francisco, Calif., awarded contract for constructing ordnance machine shop at Mare Island Navy Yard, to cost $1,250,000. Contract awarded on a cost-plus-fixed fee basis by Bureau of Yards & Docks, Navy Department, Washington, D. C.

FLOATING DRY DOCK, Brooklyn, N. Y.
Harris Structural Steel Co., New York, N. Y. has been awarded contract for constructing an 18,000-ton steel floating dry dock, for Todd Shipyards, Corp., New York, N. Y. Estimated cost is $2,000,000. Frederick R. Harris, New York is engineer.

PIER, TRESTLE, ROADWAYS, etc.
Frederick Snare Corp., New York, N. Y. has been awarded contract for constructing pier, trestle, roadways, railroad and utilities for shipment of lend-lease supplies at Jersey City Shipping Terminal, by U. S. Engineers, Washington, D. C. Cost will be $2,077,642.

FURNACE, Gary Ind.
Carnegie-Illinois Steel Corp. will construct an open hearth furnace, soaking pits, and unloading facilities with its own forces. Equipment will be added to increase capacity of the Gary plant by 25 percent. Estimated cost of the work, including equipment, is $15,000,000. The project was recommended by the Office of Production Management.

FURNACE FOUNDATIONS, Youngstown, O.
Charles Shutrump & Sons Co., Youngstown, O. will construct foundation and substructure for 1,000-ton furnace for Republic Steel Corp., Youngstown. Estimated cost is $2,000,000.

HOTEL, Washington, D. C.
John W. Harris, Associates, Inc., New York, N. Y. has been awarded contract for construction of a hotel to be occupied by women in government service, by Defense Homes Corp., Washington, D. C. Estimated cost is $1,000,000. Louis Justement, Washington, D. C. is architect.

MANUFACTURING PLANT, Hagerstown, Md.
Price Construction Co., Baltimore, Md., will build 1 & 2 story manufacturing plant for Fairchild Aircraft Corp., Hagerstown, Md. Estimated cost is $750,000. Albert Kahn, Inc. Detroit, Mich. is engineer and architect.

WATER TUNNEL, Chicago, Ill.
Kenny Construction Co., Chicago, Ill., was lowest bidder on tunnel connections to the southwest land tunnel system, South District filtration plant, at 79th St. and Lake Michigan. O. E. Hewitt, Commissioner Public Works, City Hall opened bids October 20. The low bid was $714,550.

NOTE—Additional bidding and contract news on over 800 projects large and small appear in the Construction News sections beginning on page 17.

Baltimore water demands exceed safe supply limits

Unusual demands for water because of defense industrial activity, coupled with a deficiency of rainfall in August and September, have made it necessary for the city of Baltimore to draw on reserve water storage supplies. Since Sept. 5, four billion gallons have been taken from the lake created by Pretty Boy Dam, a reserve storage project built in 1933 and never before drawn upon. The lake has a total storage of 19.7 billion gallons.

Water demands in August and September averaged 153 mgd., the highest on record for the city. This is 14 mgd. greater than the yearly average in 1940 and 5 mgd. more than the estimated safe yield of the supply. Rainfall in the Baltimore area was normal up to July 31 (when an excess of 0.84 in. was recorded) but since then to the middle of October there has been an accumulated deficiency at 4.8 in.

That defense activity has placed an abnormal demand on the city's water supply is revealed by service connection records. According to Leon Small, water engineer, there were 6,150 new services added to the system in the first eight months of 1941 compared with 5,600 services installed in the preceding 24-month period.

Plans for construction of a supplementary supply of about 85 mgd. capacity have been under study for some time by a board of consultants working with the water department. Five possible sources are under consideration, including the Susquehanna River, some tributaries to it, the Patapsco River watershed, and enlargement of storage facilities on the present Gunpowder River supply. It is understood that the selection has narrowed down to two sources but no public announcement has yet been made.

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More housing jobs get "Camden Plan" financing

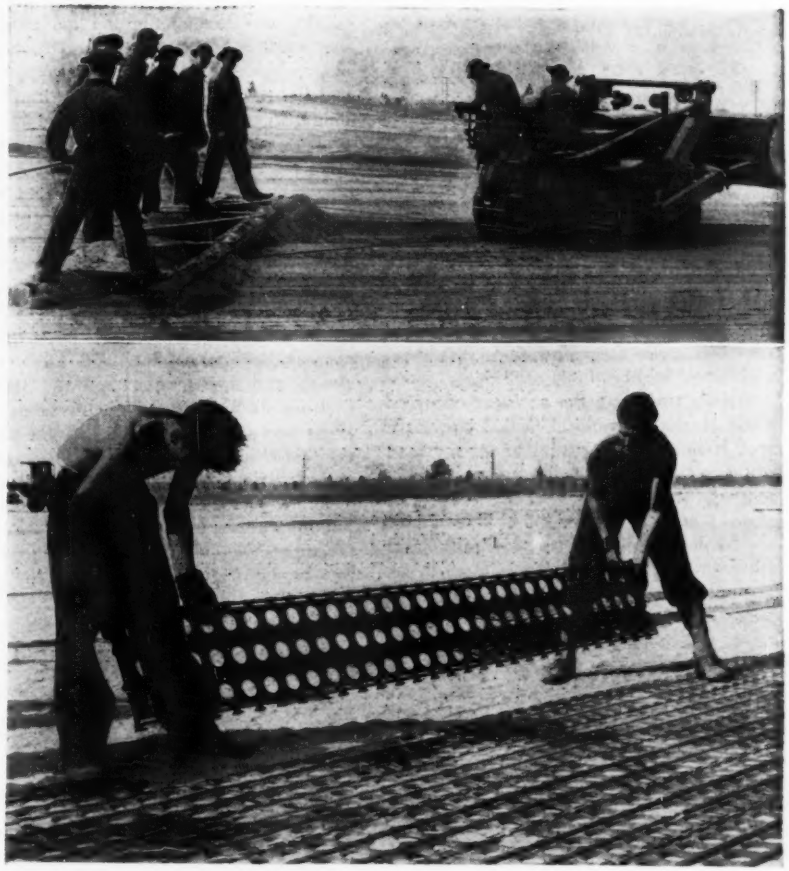
Funds have been allocated for seven more defense housing projects to be built under the mutual ownership plan inaugurated by the Federal Works Agency last spring at Camden, N. J. and Dallas, Tex., and more recently applied to the Winfield Township, N. J. project. The ten projects are under the supervision of Lawrence Westbrook, special assistant to the federal works administrator, who devised the financing arrangement popularly known as the "Camden Plan" (*ENR* May 22, 1941, p. 813).

Designed to relieve housing shortages in defense areas, the projects likewise are expected to demonstrate a method of financing housing, based in part on mutual insurance company principles, which will prove attractive to private capital investors. The houses are sold without a down payment to people who pay a monthly rental charge and thereby become stockholders in a mutual housing corporation. The corporation will pay back the original investment in the project with three percent interest.

Mr. Westbrook states that both the Camden project, which is for 500 families, and the Dallas job, designed for 300 families, are fully occupied and that applications have been received for almost all of the residences in the uncompleted 700-family Winfield Township project.

Location and size of the remaining seven new projects, some of which are ready for construction, are: Philadelphia, 1,000 units; Belmawr, N. J., 500; South Bend, Ind., 250; Dayton, Ohio, 500; Dallas, Tex., 300; Alcoa, Tenn., 250; and Wayne, Mich., 300.

It is the latter project that has federal authorities in a dither as to whether to risk upsetting the construction labor stabilization agreement with AFL by awarding the work to the CIO-organized Currier Lumber Co., or to accept a bid 50 percent higher than that of the lumber firm (*ENR*, Oct. 16, 1941, p. 539).



Acme photos

Army lays a portable runway at an airfield

Portable sections of plate steel runway surfacing were laid recently on a sandy field at Marston, N. C., as a large-scale experiment in the laying and use of such surfacing on temporary airfields. The surfacing plates here shown are one of several types that were studied last year by the Corps of Engineers at Fort Belvoir, Va., when it was thought desirable to provide a type of surfacing that could be applied quickly to temporary airfields before regular fields could be graded and surfaced. This type of surfacing unit was made by the Carnegie Steel Co. It weighs 150 lb. Another type, made by the Irving Subway Grating Co. and weighing 130 lb., was sent to the Virgin Islands for experimental use on an airfield there. The units lock together as they are laid, each unit being easily handled by one or two men.

Shown in the upper picture is the drag used to level the field in advance of the laying operations, shown below. Projections along the lower edge of the plate, as held by the men, lock into slots along the edge of the adjoining plate.

The runway, 300 ft. wide and 3000 ft. long, was put into service on Oct. 26, when a medium bomber made three landings and take-offs during the experiments at Marston, N. C.

Cause of bridge failure at Soo not determined

No defects were found in either the tension or compression locks or in the interlocking mechanism of the double-leaf bascule bridge over the main navigation canal at Sault Ste. Marie, Mich., when those devices were examined and tested following the accident of Oct. 7 (*ENR* Oct. 9, p. 475; and Oct. 16, p. 539). The bridge, a single-track structure, is part of the international crossing connecting the Canadian Pacific Ry. with rail lines in Michigan.

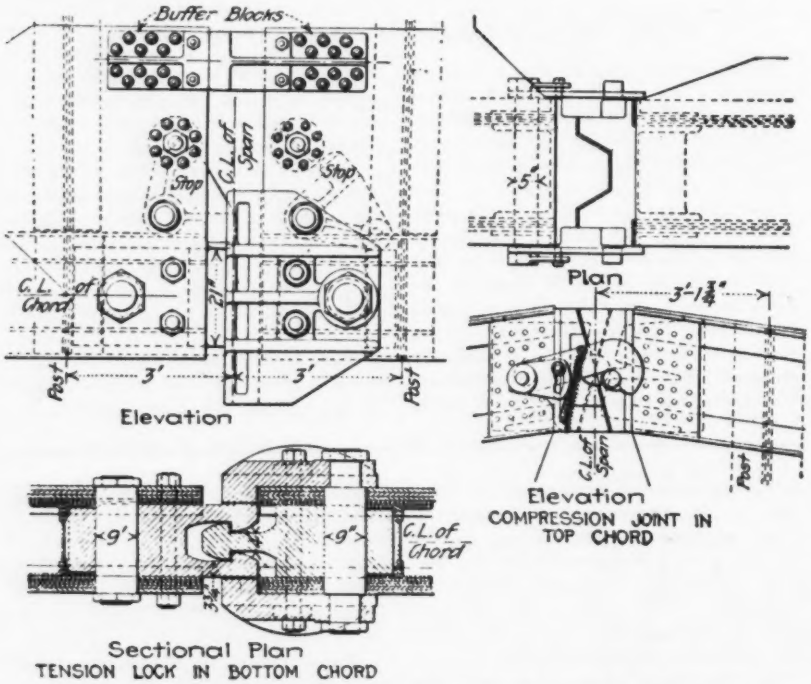
Briefly reviewed, the accident occurred early on the morning of Oct. 7, the north leaf falling into the canal under the load of a locomotive and tender of a train moving onto the bridge. All witnesses state that the signals of the elaborate mechanical and electrical interlocking system that guards the bridge were showing green, indicating that the main truss locks were properly engaged. In the fall of the north leaf its operating rack was overrun, and before the leaf came to rest its top chords had fouled the end vertical posts of the south leaf, dragging it down about three feet and disengaging the racks of its operating struts from the pinions.

In the clearing operations, as reported in *Railway Age*, Oct. 18, p. 61, the locomotive and tender were pulled clear of the north leaf and then the pontoon derricks of the canal emergency equipment were used to raise the spans until the operating racks were re-engaged by the pinions. From that point on, both leaves were raised to open position under their own power. This was accomplished during the late evening of Oct. 8. Meanwhile, the locomotive had been dragged to one side of the channel to clear part of the canal for passage of ships.

After the congestion of ships had been cleared, on the morning of Oct. 11 both spans were lowered for examination and testing and it was found that the tension castings as well as the compression and shear locks were all intact and in working condition, as were the mechanical and electrical interlocking devices.

Before returning the bridge to railway operation, bolt locks in addition to the present hook locks will be placed on the leaves of the bridge where they join each other. This is to afford double assurance that in closed position the bridge will act as a simple truss span, as contemplated in the design.

Structural damage to the bridge was slight, being confined chiefly to the end vertical posts of the south leaf. It is expected that these will be repaired and the new locks added in time to permit putting the bridge back into service before the end of October.



Tension and compression joints in Soo bascule bridge

This drawing, reproduced from Engineering News *of Jan. 21, 1915, p. 108, shows the principal details of the tension locks and the compression joints at the center of the double-leaf bascule railroad bridge over the main navigation canal at Sault Ste. Marie, Mich. The castings for the tension lock are of forged nickel steel, nickel content 3.25 percent, and not of cast steel, as stated in Engineering News-Record, Oct. 9, p. 475.*

Philadelphia blamed for Delaware River pollution

When some 250 engineers and specialists met last week in Philadelphia for a water pollution conference sponsored by the Interstate Commission on the Delaware River, it was the city of Philadelphia and its neglect of pollution control rather than stream pollution problems in general that was accorded major attention. Abel Wolman, past president of American Public Health Association and professor of sanitary engineering at The Johns Hopkins University, Baltimore, was bluntly definite when, in speaking for the benefit of the Philadelphia representatives, he stated: "You have spent about ten million dollars from 1938 to date. You have covered some 289,000 people, which is a grand accomplishment, if you didn't know the river, if you weren't aware of the fact that that's only a drop in the bucket." "This is one river basin in the United States in which the largest metropolitan area hasn't got an alibi. It is the major contributor to the mess. . . . Philadelphia is the only city of the seven largest in the United States that has done relatively nothing toward building sewage treatment facilities."

Later Professor Wolman in stating why he did not believe the city of Philadelphia had exercised reasonable diligence in trying to find a solution to its problem, said: "The reason I don't think it has is that its per capita expenditure in capital costs so far for sewage treatment is about 15c. a year as against, say, in an adjacent city half its size $1.60 a year."

After discussing the several plans that have been proposed in Philadelphia for financing sewage treatment facilities, including an outright sewer rental, the pay-as-you-go principle and use of a sanitary district authority, Professor Wolman cited the ruling 13 years ago by the U. S. Supreme Court that included the state of Illinois in an injunction against the Chicago Sanitary District. He ended, "It would be interesting to see what would happen if the State of New Jersey and the State of Delaware were to enter a suit in the U. S. Supreme Court against the Commonwealth of Pennsylvania and the City of Philadelphia for ruining an interstate stream. I suspect that they would win, and I suspect you (Philadelphia) would find the money to end pollution of the Delaware."

Lt. Col. H. B. Vaughan, Jr., district army engineer at Philadelphia, backed up the view held by Professor Wolman. Col. Vaughan stated: "The river waters from Trenton to above Riverton-Palmyra on the New Jersey side and above Frankford Creek on the Pennsylvania side are lightly polluted. Five percent

of the sewered population of 179,000 in this area discharge raw sewage into the river. Trenton, N. J., Bristol, Pa., and Bordentown, Roebling, Florence, Burlington, Beverly, Delanco and Riverside, N. J., as well as other towns comprising 93 percent of the sewered population of this area discharge partially and fully-treated sewage into the Delaware River.

"From the points mentioned above, namely Riverton-Palmyra on the Jersey side and above Frankford Creek on the Pennsylvania side to Eddystone, Pa., a distance of over 22 miles, the Delaware River is subject to gross pollution. There is only an average of 8 percent dissolved oxygen saturation in the river waters during warm weather months. In the river off Chestnut St. (Philadelphia) often during warm weather the oxygen content is zero. The cities of Philadelphia and Camden, as well as Gloucester, N. J., representing over 2,000,000 inhabitants, or 95 percent of the population of this area, discharge raw sewage into the Delaware River. Based on population statistics, the city of Philadelphia discharges 88 percent of the sewage contributed into this grossly polluted stretch of the river."

John H. Neeson, director of public works, Philadelphia, described what would be done if funds were available for sewerage improvement in his city.

OBITUARY

I. Gutmann, one of the editors of *Engineering Index*, died at New York Oct. 21, age 51. A civil engineer, born in Russia and educated in Syria, Mr. Gutmann came to this country about 1915 and was with the Spring Valley Water Co., San Francisco, from 1915 to 1920. He then was, successively, consultant to the Palestine Development Co., with Thomas H. Wiggin and Sanborn & Bogert, consulting engineers. In 1927 he joined the staff of *Engineering Index*. While with the Index he contributed extensively to engineering journals, both translations of foreign engineering articles and original studies, chiefly in hydraulics.

James C. Rickards, superintendent of the Canton, N. C., water department for the past thirty years, died at Canton, Oct. 20. He was a graduate of the University of Kentucky.

Col. C. W. Sturtevant, former consulting engineer on the Mississippi River Flood Control Board and consultant for various contractors and the U. S. Engineers on the Missouri River and Fort Peck work, died Sept. 16 at Atlanta, Ga. He served overseas with the American forces during the 1914–1918 World War, advancing to the rank of colonel.

Joseph Bourguignon, 62, civil engineer of Flushing, N. Y., died in that city Oct. 17. Following his engineering training at Cooper Union, Mr. Bourguignon worked with the Milliken Bros., American Bridge Co., Post & McCord and several other firms during his long professional career.

Major J. B. Findley, 60, head of the construction division of the Philippines Department of Engineers, died Oct. 21 at Manila. Major Findley was one of the most prominent hydraulic construction engineers in the Philippines. In 1914 he formed his own engineering company in Manila, but gave up that work to supervise the Army's construction program.

Arthur Lee Bouton, 64, veteran resident engineer of the West Virginia State Road Commission, died Oct. 9 at Clarksburg, W. Va. He had been associated with the commission for the past 19 years in various capacities, and was resident engineer at Clarksburg at the time of his death.

John Brattice Ford, president of the Huron Portland Cement Co., Detroit, Mich., died Oct. 8.

CONTRACTS AND CAPITAL

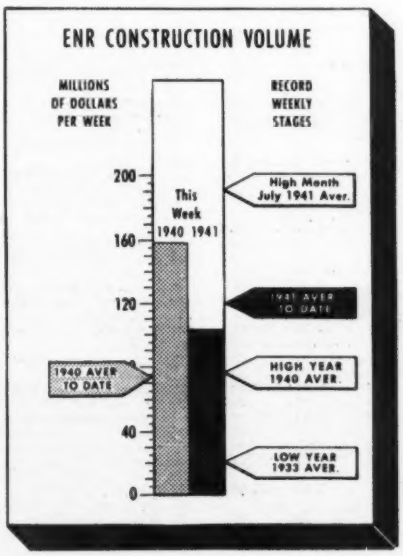
Engineering Construction awards for the week, $102,695,000, are 46 percent higher than in the preceding week, but 35 percent under the volume reported for the corresponding 1940 week.

Private awards are at the highest peak since last April due to the increased volume of industrial buildings. They top last week by 128 percent, but are 53 percent below the week last year. Public construction is up 22 percent compared with a week ago, but is 18 percent below a year ago.

The week's awards bring 1941 construction to $5,250,210,000, a 64 percent increase over the volume for the 44-week period last year. Private awards for the period, $1,061,698,000, are up 11 percent, and public construction, $4,188,512,000, is 86 percent higher due to the 196 percent gain in federal work.

Industrial building volume climbed to the highest peak reported since the corresponding 1940 week as a result of two $15,000,000 defense plant projects, one a blooming mill at Massena, N. Y., and the other an open hearth furnace in Gary, Ind. Other increases over last week are in sewerage, public buildings, and unclassified construction. Increases over the 1940 week are in earthwork and drainage, and unclassified.

New capital for construction purposes for the week totals $158,676,000. This compares with $9,610,000 for the week last year. New construction financing for the year to date, $6,089,206,000, is 72 percent above the $3,533,373,000 reported for the 44-week period last year.



CONTRACTS

(Thousands of dollars)

	Week Ending Oct. 31 1940	Oct. 23 1941	Oct. 30 1941
Federal	$53,533	$33,665	$42,880
State & Municipal	27,114	20,730	23,455
Total public	$80,647	$54,395	$66,335
Total private	77,107	15,931	36,360
TOTALS	$157,754	$70,326	$102,695

Cumulative
1941 (44 weeks) $5,250,210
1940 (44 weeks) $3,205,815

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1940 44 weeks	1941 44 weeks
NON-FEDERAL	$1,251,412	$1,263,088
Corp. Securities	214,930	322,119
State & Mun.	436,345	384,979
U.S.H.A. loans	180,465	30,399
R.F.C. loans	195,672	262,091
R.E.A. loans	40,000	100,500
Federal Aid—Hwy.	184,000	163,000
FEDERAL	$2,281,961	$4,826,118
TOTAL CAPITAL	$3,533,373	$6,089,206

FHA MORTGAGES

	Week Ending Oct. 26 1940	Oct. 18 1941	Oct. 25 1941
Selected for appraisal (Titles II and VI)	$19,601	$22,995	$24,954*

Cumulative
1941 (43 weeks) $1,219,636*
1940 (43 weeks) $1,083,931

* Subject to revision.

ENR INDEX NUMBERS

Index Base=100		1913	1926
Construction Cost	Oct. '41	264.46	127.13
Building Cost	Oct. '41	215.92	116.72
Volume	Sept. '41	410	184

CONTRACT UNIT PRICES

What contractors are bidding on different kinds of construction work

SAN VICENTE DAM, SAN DIEGO, CALIF.

OWNER: Water Department, City of San Diego, Calif.; Fred D. Pyle, hydraulic engineer.

PROJECT: Construction of San Vicente Dam, a solid masonry structure located on San Vicente Creek, about four miles north of Lakeside, Calif. Top length 950 ft.; height from stream bed 190 ft. Involves about 85,000 cu. yd. of excavation of all classes; 300,000 cu. yd. of concrete; and about 175,000 lb. of reinforcing steel. Dam is straight structure, with spillway in center and is to provide reservoir for San Diego water supply.

CONDITIONS: Contractor to provide all materials except cement, cast iron and steel pipe which are to be furnished under another contract. Work to be completed in 730 calendar days. Rail transportation facilities available to Lakeside, from whence paved highway passes through dam site. Sand is available in unlimited quantities in stream bed near work. Probability that all coarse aggregate can be obtained within reservoir basin and surrounding mountains. Wage rates prevailing are: skilled labor, $9.00 to $12.00 per 8-hour day; semi-skilled, $6.00 to $8.00; and common, $6.00.

BIDS: Four bids were opened August 26, 1941, ranging from the contract low of $1,743,908 to $2,782,440.

LIST OF BIDDERS:

1. L. E. Dixon Co., Los Angeles, Calif. (contract) $1,743,908
2. M. H. Golden, Walter Trepte, and Cecil B. Grove, San Diego, Calif. 2,463,183
3. Atkinson-Kier Co., San Francisco, Calif. 2,624,089
4. Daley Corp., and V. R. Dennis Constr. Co., Los Angeles, and San Diego, Calif. 2,782,440

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Class 1 excav. below El. 460, except Cl. 4	35,000 c. y.	$3.75	$5.11	$5.00
2. Cl. 2 excav. above El. 460, exc. Cl. 3, 4, and 5	55,000 c. y.	3.75	5.11	5.50
3. Cl. 3 outlet works excav.	800 c. y.	3.75	6.00	7.00
4. Cl. 4 excav. for drain tile	100 c. y.	5.00	9.00	40.00
5. Cl. 5 excav. for traffic by-pass	2,000 c. y.	1.00	4.10	1.25
6. Backfill	10,000 c. y.	.30	.35	.75
7. Prepare fndn. for conc.; horizontal projection only	11,000 s. y.	3.00	4.50	5.00
8. Percussion drilled grout holes, to 25-ft	2,500 l. f.	.50	1.50	1.00
9. Rotary drilled grout holes, to 25-ft	2,000 l. f.	1.50	1.90	2.50
10. As above, 25 to 50-ft. deep	1,500 l. f.	1.50	1.90	2.50
11. As above, 50 to 100-ft. deep	1,000 l. f.	1.50	1.90	2.50
12. As above, over 100-ft. deep	500 l. f.	1.50	1.90	2.50
13. Drill hardened grout from hole, 0 to 25-ft. deep	1,000 l. f.	.60	.30	1.00
14. As above, between 25 and 50-ft	750 l. f.	.60	.30	1.00
15. As above, between 50 and 100-ft	500 l. f.	.60	.30	1.50
16. As above, over 100-ft. deep	100 l. f.	.60	.30	2.00
17. 3-in. drainage holes, 0 to 25-ft	2,500 l. f.	3.10	3.70	3.50
18. 3-in. drainage holes, over 25-ft	1,250 l. f.	3.10	3.70	3.50
19. Grout connection to each hole	275 ea.	2.00	2.90	5.00
20. Grout, up to 10 c. f. in each hole	1,750 c. f.	1.78	3.00	2.50
21. Grout, from 11th to 25th c. f	3,000 c. f.	1.00	1.15	2.00
22. Grout, in excess of 25 c. f. in each hole	3,250 c. f.	.75	.85	1.50
23. Remove grout from holes, when no drilling required	5,000 l. f.	.20	.12	.75
24. 2-in. steel grout pipe	2,000 l. f.	.36	.57	.75
25. 2½-in. steel pipe	1,000 l. f.	.50	1.00	1.00
26. 6-in. drain tile	500 l. f.	.40	.40	1.50
27. 8-in. drain tile	500 l. f.	.50	.70	1.75
28. 12-in. half-round drain tile, incl. cr. rock	1,100 l. f.	.77	.90	2.50
29. Class 1 conc., mass conc. in place	300,000 c. y.	4.15	5.90	6.24
30. Cl. 2 conc., spillway guide walls	200 c. y.	16.00	29.00	25.00
31. Cl. 3 conc.; outlet tower, exc. base	600 c. y.	15.00	27.50	25.00
32. Cl. 4 conc.; adit and shaft to outlet tower	50 c. y.	25.00	40.00	30.00
33. Cl. 5 conc. in parapets	140 c. y.	16.00	41.00	35.00
34. Cl. 6 conc. in valve chamber	70 c. y.	30.00	30.00	35.00
35. Cl. 7 conc. in exterior stairs	60 c. y.	30.00	38.00	25.00
36. Cl. 8 conc. to fill temp. dam openings	2,000 c. y.	5.00	5.60	7.00
37. Reinforcing steel	175,000 lb.	.05	.07	.055
38. Copper grout stops around temp. openings	400 l. f.	1.40	.65	2.50
39. Copper water seals in contrac. joints	2,500 l. f.	1.40	1.00	2.00
40. Forming 8-in. vertical drains	11,500 l. f.	.40	.30	.50
41. 16-ga. copper downspout, vert. drains	25 ea.	10.00	1.00	15.00
42. Plug and copper tube, lower portion of vert. drains in gallery	50 ea.	16.00	1.00	15.00
43. Inst. grout tubing, fittings and units (furn. by City)	6,000 lb.	.15	.10	.25
44. Inst. cast iron, cast steel and wr. steel pipe, fittings, gate valves (City)	170,000 lb.	.02	.047	.05
45. 30-in. c. i. saucer valves, cast st. cover	50,000 lb.	.12	.41	.41
46. As above, 36-in	3 ea.	1,113.00	2,500.00	2,500.00
47. Misc. c. i. covers and frames	5,000 lb.	.15	.20	.20
48. C. i. covers for drainage wells	65 ea.	9.00	7.00	20.00
49. Struc. steel doors, galv.; outlet tower	100 lb.	.65	1.00	1.00
50. Structural steel I-beams	1,300 lb.	.22	.20	.20
51. 12-in. outlet tower vents	5 ea.	15.00	25.00	20.00
52. Str. steel covers, rim angles; out. tower	1,300 lb.	.26	.30	.35
53. Outlet extension	1 ea.	150.00	185.00	300.00
54. Fish screen	1 ea.	250.00	255.00	450.00
55. Galv. steel ladders and guards	3,000 lb.	.30	.30	.40
56. ¼-in. steel plate gallery gates	2,000 lb.	.45	.35	.50
57. Misc. structural steel	10,000 lb.	.15	.18	.40
58. Galv. metal covered valve chamber doors	1 pr.	50.00	100.00	200.00
59. 3½ x 4-ft. galv. steel sash, hinged, with wire glass and copper screens	3 ea.	65.00	25.00	50.00
60. Stationary power-driven hoist	1 ea.	900.00	960.00	1,250.00
61. 5-ton chain block and trolley	1 ea.	400.00	170.00	400.00
62. Swivel sheaves	10 ea.	26.00	8.00	40.00
63. ⅝-in. galv. iron chains for out. works	1,400 l. f.	.90	.70	1.00
64. 2-in. iron pipe handrailing assem.	1,200 l. f.	2.50	1.50	4.00
65. 2½-in. iron pipe handrailing assem.	900 l. f.	2.50	2.25	4.00
66. 34-in. galv. iron 2 x 4-in. fencing	900 l. f.	.13	.25	.20
67. Flag pole	1 ea.	70.00	75.00	200.00
68. Bronze inscription plates	275 lb.	1.08	.85	1.25
69. Enameled water level gage	175 l. f.	.80	1.05	3.00
70. Timber structures, No. 1 O. P	5 Mbf.	100.00	100.00	200.00
71. Galv. iron pipe and housing for water level recorder, and inst. recording instruments furn. by City	L. S.	341.00	290.00	1,200.00
72. Electr. wk.; light. sys. and power outlets	L. S.	1,200.00	4,000.00	4,000.00
73. Water furn. for City camp	400,000 c. f.	.10	.10	.10
74. Conc. forms and misc. work for highway tunnel	L. S.	6,635.00	3,000.00	3,500.00

CONCRETE HIGHWAY, MARYLAND

OWNER: State Roads Commission of Maryland, Baltimore.

PROJECT: Construction of Salisbury By-Pass, beginning at East Main Street and terminating at North Division Street at south end of overhead crossing on Salisbury-Delmar Road. Entails approximately one mile of concrete dual highway construction, grading, and drainage structures.

CONDITIONS: Contractor to furnish all materials and complete all work in 92 working days. Rail, highway and water transportation facilities available. Wage rate minimums on job are: skilled labor, 65c. per hr.; semi-skilled, 50c.; and common, 35c.

BIDS: Three bids were received September 9, 1941, ranging from the contract low of $127,611 to $154,530.

LIST OF BIDDERS:

1. Philips Brothers, Salisbury, Md. (contract) $127,611
2. Hannaman-Burroughs Co., Salisbury, Md. 134,557
3. Waller Paving Co., Inc., Salisbury, Md. 154,530

Item	Quan.	Unit Prices (1)	(2)	(3)
1. Clearing and grubbing	L. S.	$1,000.00	$800.00	$2,000.00
2. Class 1 excavation	15,000 c. y.	.70	.50	.50
3. Class 2 excavation	600 c. y.	.85	1.00	1.00
4. Borrow excavation	500 c. y.	.50	.70	.80
5. Tamped fill	600 c. y.	.60	.80	1.00
6. Furn. and place topsoil	425 s. y.	.35	.30	.50
7. Seeding	4 M s. f.	10.00	10.00	5.00
8. Remove existing masonry	25 c. y.	6.00	10.00	10.00
9. Bitum. stabilized base course	1,400 s. y.	.50	.40	1.00
10. New aggr. bit. stab. base crse	300 ton	4.00	3.00	4.00
11. Bitum. matl. for bit. stab. base crse	1,050 gal.	.14	.20	.25
12. 7-in. conc. base course (A-reg.)	2,000 s. y.	2.45	2.50	3.00
13. 9-7-in. plain cem. conc. pavmt. (A-reg.)	20,000 s. y.	2.62	2.98	3.00
14. 9-7-in. pl. cem. conc. pav. (XES)	3,000 s. y.	2.82	3.18	3.25
15. 9-9-in. pl. cem. conc. pavmt. (A-reg.)	5,000 s. y.	2.95	3.33	3.50
16. 9-9-in. pl. cem. conc. pavmt. (XES)	4,100 s. y.	3.15	3.48	4.00
17. Bitum. surf. crse. (Specif. C)	325 ton	8.00	7.70	9.00
18. Top dressing	12 ton	7.00	2.00	50.00
19. Bitum. matl.; tack coat	300 gal.	.14	.20	.40
20. 6-in. perf. corr. met. pipe or reinf. conc. pipe underdrain	200 l. f.	1.25	1.00	1.00
21. 6-in. corr. met. pipe or reinf. conc. pipe underdrain outlet	50 l. f.	1.25	1.00	1.00
22. Aggregate for underdrain	25 c. y.	4.50	3.00	4.00
23. Class A conc. reg. cement	5 c. y.	35.00	40.00	40.00
24. Reinforcing steel bars	150 lb.	.10	.10	.10
25. Comb. cem. conc. curb and gutter	6,700 l. f.	1.60	1.40	2.00
26. 8x20-in. pl. cem. conc. curb	2,500 l. f.	1.20	1.25	1.50
27. 8x18-in. white cem. conc. curb	525 l. f.	1.75	2.00	3.00
28. Maintenance of traffic	L. S.	1,200.00	1,000.00	3,000.00

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

Location of ENR Correspondents

Symbols and Abbreviations Include:

† Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger; water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply — Unclassified
Sewers, Waste Disposal — Latin America
Bridges, Grade Cross'gs — Public Buildings
Streets & Roads — Commercial Buildings
Earthwork, Waterways — Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: All low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

WATER SUPPLY

PROPOSED WORK

Ill., Belvidere—F. L. Shattuck, city clk., imprv. water sys. $45,000. M. Lamb, city engr.

†Ill., Christopher—L. Hileman, mayor, water supply and distr. extens., etc., new and larger storage reservoir. $50,000. **DPW.** CD 9/3—ENR 9/11.

†Ill., Ellwood—Village, WW sys., water supply, elevated tank, pump, pump house, mains, etc., Docket Ill. 11-171. $50,160. **DPW.** CD 12/24—ENR 1/2.

Ia., Russell—WW and sewerage sys. imprvs. $35,000.

Kan., Junction City—Exten. mains, hydrants, connections. $76,000.

†Kan., Ogden—City, WW sys. addns., imprvs., Docket Kan. 14-137. $7,365. **DPW.**

†La., Alexandria — City, WW sys. addns., etc., Docket La. 16-117. $333,000. **DPW.** CD 10/23.

†La., Oakdale—City, water, sewer and disposal plant, La. 16-103. $388,770. **DPW.** A. F. Rideout, Thompson Bldg., De Ridder, engr. CD 10/9—ENR 10/16.

La., Minden—F. D. Culbertson, Jr., mayor, WW imprvs. $86,257. Applied for DPW funds. H. H. Hardeman, Minden, and J. M. Fourmy, Hammond, engrs.

Miss., Kilmichael— WW sys., $50,000. E. W. Mallett, Jr., engr.

†Mo., Rolla — City, WW, Docket 23-107. $293,130. **DPW.** Russell & Axon, 4903 Delmar St., St. Louis, engrs. CD 10/18—ENR 10/16.

†Mo., Waynesville—City, WW, Docket Mo. 23-109. $108,000. **DPW.** Russell & Axon, 4903 Delmar St., St. Louis, engrs. CD 10/30—ENR 10/2.

Mont., West Yellowstone—Community comm. considering incorporation or formation rural imprv. distr., water and sewerage sys. Over $50,000.

N. J., Newark—Water Dpt., City Hall Annex, sheeting, watermains, N. 5 St. and Davenport Ave. $38,481. **WPA.** W. Banks, City Hall, WPA and city engr.

N. J., Perth Amboy—Water pipe-lines under Raritan River and Bay. $407,450. Applied for DPW funds. L. P. Booz, Jr., 263 Madison Ave., engr.

N. Y., Brooklyn—President, Brooklyn Boro, Boro Hall, replacing pump sta., Neptune Ave. and W. 29 St. $187,000.

N. C., Fayetteville—P. Wks. Comn., J. F. Burgess, chn., City Hall, withdrew bids to have been opened Oct. 24. WW imprvs. Will revise plans. CD 10/20.

†N. C., Holly Ridge—Town, WW sys., Docket N. C. 31-140. $96,000. **DPW.**

★ **N. C., Wilmington**—$755,000 bond election Dec. 2, incl., expanding city water supply, $525,000; incinerator $100,000; exten. storm sewers in area of Greenfield Lake, $75,000; exten. sewerage sys. same area, $35,000; purchasing, developing Robert Strange playground and Marine Hospital, $20,000. Total est. $3,500,000. J. G. Wallace, city mgr. CD 9/18—ENR 9/25.

O., Bettsville—C. S. Seiger, mayor, $52,000 bond election Nov. 4, WW sys. CD 9/8—ENR 9/11.

★ **O., Cleveland**—10 m.g. rein.-con. reservoir $275,000, 40 m.g. pump and boilers $525,000, 75 m.g. pump and boiler $220,000, feeder mains up to 48 in. $1,425,000, watermains, $1,023,360, mains, cross connections, fire hydrants, etc. $1,211,500; rein.-con. reservoir, watermains, south of Chardon Rd. $625,000. G. W. Hamlin, 104 City Hall, engr.

O., Grover Hill—J. Smith, mayor, WW sys. $40,000.

O., Salem—Watermain exten. E. Eighth St., Buckeye and S. Bundy Aves., etc. $25,000-$30,000. F. S. Barckoff, Salem, engr.

Okla., Pryor—WW plant addn., extens. $35,000.

★ **†Okla., Tulsa**—City, WW sys., entens., imprvs., Docket Okla. 34-105. $558,895. WW sys. extens., imprvs., Docket Okla. 34-101. $340,499. **DPW.**

Pa., Pittsburgh—Ross Twp. Auth., Ross Twp., c.i. watermains, fire hydrants, etc. Ross Twp. over $15,000.

Tex., Freeport—Town, exten., imprv. WW, 250,000 gal. steel tank, 6 and 8 in. c.i. pipe, etc., Docket Tex. 41-263. $139,700. **DPW.** H. G. Olmstead, Box 1016, Houston, engr. CD 9/3—ENR 9/11.

Tex., Quitman—Surveys, WW sys. Over $15,000. Albert C. Moore & Co., 2404 Smith-Young Tower, San Antonio, engrs.

Utah, Salt Lake City—W. D. Beers, city engr., City & County Bldg., furnishing, installing structures, sterilization equip., city water supply reservoirs and conduits. $30,000.

Wash., Orting—Imprv. water supply sys. $37,547. Seeking WPA funds. CD 6/13—ENR 6/19.

Wis., Kewaunee — Preliminary sketches, water softening plant, concrete storage reservoir. J. Donohue Eng. Co., 608 N. 8 St., Sheboygan, engr.

Wis., Marinette—Foth & Boyd, engrs., Columbus Bldg., Green Bay, preparing preliminary plans and report master water treatment plant.

Alta., Barrhead—Water reservoir imprvs. $21,000.

BIDS ASKED

Bids Asked November 3

Md., Towson—Comrs. Baltimore Co., Court House, furnishing, laying 14,880 lin. ft. 6- to 12-in., c.i. water pipe, fittings, etc. Jappa Rd.

Bids Asked November 6

Ia., Burlington—Des Moines Co., steel water tower, County Home. Keffer & Sons, Masonic Temple, Des Moines, archts.

O., Cleveland—F. Foy, city purch. agt., 2,000 ft. 14 ft. 10 in. brick diversion tunnel from Kingsbury Run, Cuyahoga River to E. 37 St. $482,000. E. C. Richardson, 517 City Hall, engr.

Bids Asked November 7

†Ala., Childersburg—City, WW and sanitary sewer imprvs., Docket Ala. 1-102. $215,000. **DPW.** J. W. Goodwin Eng. Co., Martin Bldg., Birmingham, engrs. CD 9/8—ENR 9/11.

Bids Asked November 12

O., Toledo—J. H. Jewhurst, dir. P. Serv., Contr. 69, installing 13,100 ft. 24 in. and 20 in. trunk watermains, Jackman Rd. Over $15,000. C. L. Piper, city engr.

★ **†Tex., Galveston** — City, c/o B. Harris, mayor, WW imprvs., test wells, supply wells, pumps, accessories, distr. sys. extens., storage reservoir, booster sta. enlargement, Alta Loma and leak survey and rehabilitate sys. $1,282,000. **DPW.** Ford, Bacon & Davis, Santa Fe Bldg., Galveston, engrs. CD 9/4—ENR 9/11.

Bids Asked November 14

Ill., Chicago—O. E. Hewitt, comr. P. Wks., superstructures low lift pump. sta., filter and administration bldgs., South Dist. Filtration Plant, vicinity E. 79 St. and Lake Michigan. Extended date; adv. ENR 10/30. CD 10/15—ENR 10/23.

Bids Asked About December 1

†W. Va., Huntington—U. S. Eng., Huntington, pumping stations, Thirty-fifth, Richmond and Oaks Sts., for Local Protection Proj., Huntington, W. Va., Sect. 3 (Guyandot).

LOW BIDDERS

★ **†Calif., Camp Haan**—Con. Q. M., Oct. 21, water supply sys., from Morrison-Knudsen Co., 411 W. 5 St., Los Angeles, **$523,924.** CD 10/8.

†Calif., Camp Haan—Con. Q.M., Oct. 21, water treatment plant, clearwater reservoir, 1 mi. pipe line, etc., from A. C. Lo Prest, 560 7 St., San Francisco, and Ocean Shore Iron Wks., 550 8 St., both San Francisco. **$198,455.** CD 10/8.

★ **Ill., Chicago**—City, O. E. Hewitt, comr. P. Wks., City Hall, Oct. 20, tunnel connections to southwest land tunnel sys., South Dist. filtration plant, vicinity 79 St. and Lake Michigan, from Kenny Constr. Co., 111 W. Washington St. **$714,550.** CD 10/9—ENR 10/16.

CONTRACTS AWARDED

Mass., Worcester—H. Green, comr. P. Wks., City Hall, WW sys. expansion, Lynch Brook Reservoir, water pipelines, pump. sta., day labor. **$95,000.** E. R. Perry, Bureau Eng., City Hall, engrs. CD 10/6—ENR 10/9.

N. J., Newark—Water Dpt., City Hall Annex, sheeting, 48 in. pressure steel watermain, through Branch Brook Park from Essex Co. Park Rd. to 2nd River, **WPA. $260,161.** W. Banks, City Hall Annex, WPA and city engr.

N. Y., Buffalo—Dpt. P. Wks., City Hall, pump house, Perrysburg, to Ryan & Smith, 236 Herkimer St. and Henry H. Cranston & Son, 310 W. Main St., Falconer. Est. over **$15,000.**

N. Y., Evans Mills—Wells, pumps, etc., to Layne N. Y. Corp., 92 Liberty St., New York. Est. **$15,000.** Wm. S. Lozier, Inc., 10 Gibbs St., Rochester, engrs.

N. D., Fessenden—Water supply sys. **WPA. $52,065.**

†Pa., Beaver—Borough Twp., Beaver, WW sys., Docket Pa. 36-101, Contr. 1, wells, pump and housing, detention tank, venturi meter, reservoir and Contr. 2, distr. mains, drainage, to John Carson & Sons, 1248 Pennsylvania Ave., N.S., Pittsburgh. **$56,637** and **$33,324** respectively; Contr. 3, electrical work, to Pitt Constr. Co., 1235 Washington Blvd., Pittsburgh. **$5,430.** Grand total $95,391. Est. $120,000. **DPW.** Bid 10/22. CD 10/20.

Pa., Phila.—Bureau Water, Dpt. P. Wks., City Hall Annex, watermains, to F. A. Canuso & Son, 804 S. 12 St., **$108,701;** to Conduit & Foundation Co., Commercial Trust Bldg., **$36,052.**

Ont., Petawawa—Dpt. National Defense, Ottawa, installing watermains, Military Camp, to McNally-Patterson & Hanes, 211 Parkdale Ave., Ottawa. **$27,000.** CD 10/9—ENR 10/16.

SEWERS, WASTE DISPOSAL

PROPOSED WORK

†Conn., Groton—Boro, sewage disposal sys., additional facilities, Docket Conn. 6-168. $227,600. **DPW.** Metcalf & Eddy, 1300 Statler Bldg., Boston, Mass., engrs. CD 10/22.

SEWERS, etc. (Proposed Work, Cont'd.)

†Fla., Key West—City, exten. sewerage sys., Docket Fla. 8-105. $100,000. **DPW.**

Ill., Galesburg—Galesburg Sanitary Dist., received no bids Oct. 20, sewage digesting tank and equip. $30,000. Will readvertise. Alvord, Burdick & Howson, 20 N. Wacker Dr., Chicago, engrs. CD 9/24—ENR 10/2.

Kan., Kansas City—Sewers 7 to 10 sts. and Boswell Ave. to Missouri Pacific tracks. $135,000. Applied to PWA. T. Schlup, city engr.

Ky., Louisville—Louisville Dpt. Works, sewers. $100,000. Applying for WPA funds.

†La., Alexandria—City, sewerage sys. addns. Docket La. 16-116. $180,000. **DPW.** CD 10/22.

La., Baton Rouge—F. S. LeBlanc, mayor, incinerator. $200,000. Applied for DPW funds. E. B. Blakewood, Jr., City Hall, engr.

La., Minden — F. D. Culbertson, mayor, sewer exten., disposal plant. $352,397. Applied for DPW funds. H. H. Hardeman, Minden, and J. M. Fourmy, Hammond, engrs.

La., New Orleans—A. G. Moffat, secy. Sewerage & Water Bd., sewer extens. $69,215. Applied for DPW funds.

†Me., Bath—City exten. sewerage sys., Docket Me. 17-111. $22,750. **DPW.**

†Md., Baltimore—Baltimore County Metropolitan Dist., sewerage facilities, Docket Md. 18-101. $155,000, **DPW.**

†Mo., Rolla—City, sanitary sewers, Docket Mo. 23-106. $298,000. **DPW.** Russell & Axon, 4903 Delmar St., St. Louis, engrs. CD 10/6—ENR 10/9.

†Mo., Waynesville—City, sanitary sewers, Docket Mo. 23-110. $169,000. **DPW.** Russell & Axon, 4903 Delmar St., St. Louis, Mo., engrs. CD 9/20—ENR 10/2.

†N.H., Portsmouth—City, sewer, exten. 5 outlets, Docket N.H. 27-108, $150,906. **DPW.** Whitman & Howard, 89 Broad St., Boston, Mass., engrs. CD 10/9—ENR 10/16.

N. J., Egg Harbor—Storm drainage, brick sewers, manholes, inlets, ditches, etc., various streets. $54,021. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. J., Livingston—9 mi. sanitary sewers various streets, force main and pump. sta. near Livingston Center. $85,000. T. F. Bowe, 110 Williams St., New York, N. Y., engr.

★**N. J., Long Branch**—Brick, steel sewage treatment plant addn. $680,000. Applied for DPW funds. C. Kupper, 15 Stelton Rd., New Market, engr.

N. J., Millville—8 and 10 in. sanitary sewer exten., 4 in. laterals, manholes, etc., various streets. $59,808. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. J., Newark—Sheeting, sewer, Avenue A. $261,541. WPA. J. Costello, City Hall, WPA and city engr.

N. J., North Brunswick—Sewage disposal plant addn. $200,000. Applied for DPW funds. H. R. Fleming, 9 Allen St., engr.

N. J., Paulsboro—1,942 ft. 24 to 48-in. concrete storm sewers, manholes, inlets, 610 ft. 8 in. auxiliary sewer, appurtenances, Spence and Adams St. $66,010. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. J., Pennsgrove—Lower Penns Neck Twp., Twp. Hall, terra cotta and c.i. storm sewers, 117 inlets, 65 manholes, various streets. $54,821. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. J., Perth Amboy—8 in. vitr. tile lateral sanitary sewers, $78,069. WPA. J. H. Weltzen, Smith and Hobart Sts., owner's and WPA engr.

N. J., Stirling—Passaic Twp., Twp. Hall, 5 and 8 in. vitr. tile sanitary sewers area tributary to Main Ave. and Passaic Valley Rd. $57,034. WPA. C. Malstrom, Orange and N. 6 Sts., Newark, owner's and WPA engr.

N. J., Vineland—Landis Twp., Twp. Hall, storm sewers, catch basins, manholes, imprv. streets. $55,543. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. Y., Ravena—Sewage plant. $100,000. Morrell Vrooman, Inc., 21 W. Main St., Gloversville, engrs.

†N. Y., Youngstown—Con. Q.M. Fort Niagara, Youngstown, incinerator, Fort Niagara. $17,000.

†N. C., Fayetteville—City, J. S. McFadyen, mayor, $375,000 bond election Nov. 18, sewage disposal plant, street imprvs. **DPW.** CD 10/6—ENR 10/9.

†N. C., Holly Ridge—Town, sewerage sys., incl. sewage treatment plant, Docket N.C. 31-141. $95,000. **DPW.**

O., East Liverpool—Sewerage sys. exten., eastern section city. $110,000. G. Bloomgren, city engr.

Pa., Corry—Corry Sewer Auth., A. Colegrove, pres., 331 Euclid St., sewage disposal sys. and plant. $250,000. Seeking DPW funds. Havens & Emerson, Leader Bldg., Cleveland, O., engrs. CD 5/21—ENR 5/29.

Pa., Reading—Filter beds, sewage disposal plant, Fritz's Island, tanks, etc. Over $25,000. R. S. Chubb, city engr.

Tex., Quitman—Surveys, sanitary sewerage sys., etc. Over $25,000. Albert C. Moore & Co., 2404 Smith-Young Tower, San Antonio, engrs.

†Wash., Kirkland—City, sewerage sys., Docket Wash. 45-151, $240,000, **DPW.** H. H. Sisler, 2821-29 Ave. W., Seattle, engr. CD 10/9—ENR 10/16.

Wis., Horicon—Secondary sewerage treatment plant addn. P. L. Schroeder, 903 Harvey Ave., Watertown, engr.

Ont., Woodstock—Incinerator. W. G. Ure, City Hall, engr.

BIDS ASKED

Bids Asked November 6

N. Y., Kew Gardens — President Queens Boro, Boro Hall, 120-55 Queens Blvd., sanitary sewer, appurtenances, Rockaway Blvd., 132, 134, 135, 136 and N. Conduit Aves., 153, 181 and Cranston Sts.

Bids Asked November 7

†Ala., Sylacauga—City, sewage treatment plant, outfall sewer line, Docket Ala. 1-101. $180,000. **DPW.** J. W. Goodwin Eng. Co., Martin Bldg., Birmingham, engrs. CD 9/10—ENR 9/18.

★**N. Y., New York**—Dpt. P. Wks., Municipal Bldg., Contr. 4, structures and equip. Contr. 5, piping, 26 Ward Sewage Treatment Works. Bids 10/8 rejected. CD 10/9—ENR 10/16, under LB.

Tex., Orange—A. Sokolski, mayor, sewage lift station, sanitary sewerage sys. exten., enlarging sewage disposal plant. $136,000. C. P. Smith, Bancroft Bldg., engr.

Bids Asked November 10

†La., De Ridder—City, sanitary sewerage and water sys., Docket La. 16-102, **DPW.** $478,222. Extended date. A. F. Rideout, City Hall Bldg., engr. CD 10/22—ENR 10/16.

Bids Asked November 12

N. J., Maywood—Mayor and Boro Council, Boro Hall, S. C. Ogden, boro clk., sewage treatment works. McClave & McClave, 600 Gorge Rd., Cliffside Park, boro engrs. CD 7/23—ENR 7/31.

†Va., Norfolk—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., incinerator, approach ramps, Naval Operating Base No. 10619.

Bids Asked About November 15

Tex., Teneha—D. McNeill, mayor, sanitary sewerage sys. $52,000. Freese & Nichols, Capps Bldg., Fort Worth, consult. engrs. CD 7/28—ENR 7/31.

LOW BIDDERS

Calif., Sacramento—Rein.-con. and vitr. sewers, Carleton Tract, etc., from A. Teichert & Son, Inc., 1846-37 St., **$119,892.**

Conn., Hartford—Metropolitan Dist. Bd. Contr. & Supply, 550 Main St., Oct. 20, 874 ft. 36 and 42 in. sewers, from B M Y Constr. Co., 752 Silas Deane Hy., Wethersfield, **$29,846.**

Ky., Greendale — Commonwealth of Kentucky, Eng. & Constr. Div., c/o R. C. Wyatt, ch. engr., Frankfort, Oct. 14, sewage disposal plant, comminutor, settling basins, chlorinator, etc., from Clark-Stewart-Wood, 640 W. 2 St., Lexington. **$46,123.** Est. $35,000. CD 7/25—ENR 7/3.

†La., Leesville—Town, Oct. 17, sewers, Docket La. 16-101, from Dalton Bros., Great Natl. Life Bldg., Dallas, Tex., **$283,000. DPW.** CD 10/8.

†Md., Aberdeen—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., Oct. 23, sewage treatment plant, Aberdeen Proving Grounds, from Corigliano Bros., 56 Sherwood Ave., Ossining, N. Y. **$83,385.** CD 10/9—ENR 10/16.

†Pa., Beaver—Borough Twp., Beaver, sewerage sys. near Curtiss Wright plant, Pa. 36-103, from Mike Manella, Grant Bldg., Pittsburgh. **$99,000.** CD 10/20.

CONTRACTS AWARDED

Calif., Palo Alto—Concrete and corrugated metal storm sewers, etc. portions Alma and Ramona Sts., etc., to Oakland Sewer Constr. Co., 9915 Walnut St., Oakland, **$28,390.** CD 10/8—ENR 10/16.

†N. J., Audubon—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., storm sewer, pump. station, excavating, defense housing, **WPA. $93,297.** G. R. Swinton, 930 Atlantic Ave., Atlantic, WPA and owner's engr.

N. J., Newark—Sheeting sewers Adams St., **WPA. $110,268.** J. Costello, City Hall, city and WPA engr.

N. J., Pennsgrove—Lower Penns Neck Twp., Twp. Hall, 32,196 ft. 12 in. terra cotta storm sewers. **WPA. $92,026.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. Y., Brooklyn—President, Brooklyn Boro, Boro Hall, pointing, grouting brick sewers. **WPA. $71,300.** W. W. Johnstone, 70 Columbus Ave., New York, dir. Div. Operations.

N. Y., New York — President, Manhattan Boro, Municipal Bldg., 668 ft. 4 ft x 2 ft. and 48 ft. 6 ft. x 2 ft. FTRC sewers 145 St. south side. **WPA. $76,885.** W. W. Johnstone, 70 Culumbus Ave., dir. Div. Operations.

O., Chauncey — Sewage treatment plant, water supply sys. **WPA.** $215,000.

Wis., Hales Corners (P. O. West Allis)—Sanitary Dist. and Addn. 1, sewage treatment plant and pump. stations. Hron Bros. Co., Inc., 213 N. Main St., West Bend. **$80,032.** CD 10/17—ENR 10/23, under LB.

Ont., Mountain View—Dpt. Natl. Defense for Air, Ottawa, sewage disposal plant, Bombing and Gunnery School, to Armstrong Bros. Constr. Co. Ltd., Brampton, about **$30,000.**

★**Ont., Toronto**—Chn. Bd. Control, 1st section sewage disposal plant, Fisherman's Island, to Rayner Constr. Co. Ltd., 29 Commercial St., Leaside, **$5,600,000.** Cost plus fee basis, Bids 7/29. CD 8/12—ENR 9/14 under LB.

BRIDGES, GRADE CROSSINGS

PROPOSED WORK

★**Idaho, Coeur d'Alene**—State Hy. Dpt., Boise, bids soon bridge across Blue Creek bay, near here. $500,000. CD 8/28—ENR 9/4.

Ill., Chicago—Penna. R. R. Co., Union Sta., I. W. Geer, ch. Engr. (western region) reconstructing overhead railroad bridge, vicinity Leavitt St. (vacated) and 49 St.

Missouri—State Hy. Comn., Jefferson City, three 30 ft. rein.-con. deck girder spans over Salt Fork Creek, Fayette Rd. N., Route 5M Sect. 2 B, Howard Co. C. W. Brown, Jefferson City, engr.

O., Waterville—State Hy. Dpt., Columbus, bridge over Maumee River. $225,000.

Pa., Johnstown—Baltimore & Ohio R. R. Co., A. C. Clarke, asst. ch. engr., Smithfield and Water Sts., Pittsburgh, Pa., imprv. railroad trestle, incl. reconstructing piers, etc. over Stonycreek River and Valley Pike. Over $25,000.

Pa., Lehighton — State Hy. Dpt., I. L. Hughes, secy., Harrisburg, 3 span, continuous deck I-beam bridge, rein.-con. piers, abutments, over Lehigh Valley R.R. and over Mahoning Creek. $120,000. T. C. Frame, c/o owner, ch. engr.

Tenn., Nashville—Lytton Hickman, bridge across Cumberland River, near here. $300,000.

Wis., Horicon—Bridge over Rock River, Lake St. P. L. Schroeder, 903 Harvey St., Watertown, engr.

BIDS ASKED

Bids Asked November 3

Connecticut—State Hy. Comn., W. J. Cox, comr., Hartford, single span girder bridge over Park River Conduit, 655 ft. bituminous macadam approaches, Commerce St., Hartford; 2 concrete bridges, 1 at Matthews St. and other Makara St., Plymouth; twin 60 ACCMP culvert Watchaug Rd., replacing traffic bound gravel, Somers. Over $25,000.

Bids Asked November 4

Iowa—State Hy. Comn., Ames, one 115x20 ft. multiple span I-beam bridge over Wapsie Overflow, Sect. 2, Fremont Twp., FSN-811, Bremer Co.; 10 rein.-con. box culverts, raising headwalls on 1 rein.-con. box culvert, 7 rein.-con. slab bridges on timber abutments, 4 rein.-con. pipe culverts with flume outlets, road out of Deloit northeast to Boyer, FAS-524-A(1), 24x22 ft., rein.-con. slab bridge and 22x40 ft., rein.-con. deck girder bridge, both Crawford Co.; 297x20 ft. continuous concrete girder or continuous I-beam bridge, local road, over Raccoon River, Sect. 8, Kendrick Twp. FM-27, Greene Co.; 210x22 ft., continuous I-beam bridge over West Nodaway River, on County Trunk Road N, Sect. 28, Jackson Twp., FM-2, Montgomery Co.; 24x14 ft., rigid frame bridge on local road, FM-56, Muscatine Co. F. R. White, Ames, engr.

Bids Asked November 7

N. J., Moorestown — Burlington Co. Bd. Freeholders, Administration Bldg., Mount Holly, reconstructing Bridge B4.70. Over $25,000. F. L. Branin, Administration Bldg., Mt. Holly, engr. CD 5/23—ENR 5/8, under Mount Holly.

Bids Asked November 18

Mo., Kansas City—A. C. Everham, dir. P. Wks., City Hall, main viaduct, Southwest Trafficway Project. Howard, Needles, Tammen & Bergendoff, 1012 Baltimore Ave., consult. engrs.; adv. ENR 10/30.

Bids Asked November 19

New York—A. W. Brandt, supt. P. Wks., Albany, bridges, grade separation structures, grading, etc., Jefferson and Orange Counties; adv. ENR 10/30.

Bids Asked December 1

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, rein.-con. bridge over Los Angeles River, on Firestone Blvd., Los Angeles Co., Inv. 115. Over $200,000.

IDGES, etc. (Continued)

W BIDDERS

†**Montana**—Pub. Roads Admin., 316. New ostoffice Bldg., Portland, Ore., Oct. 22, 786 steel, rein.-con. bridge over Clark's Fork ver and tracks Northern Pacific Ry., Min- al Co., from R. L. Blair, 1220 Ide St., Spo- ne, Wash. **$173,578.** CD 10/18.

NTRACTS AWARDED

Kansas—State Hy. Dpt., Seneca, Bridge 6, FA 524 A, Pottawatomie Co., to D. G. nsen, Logan, **$30,623;** Bridge 20.2, Brown d Nemaha Counties, to R. G. Aldridge, 1310 te Ave., Kansas City, **$25,843.** Bids 10/7, arded 10/16. CD 9/24—ENR 10/2.

Que., Rouyn—Dpt. P. Wks., Quebec City, structure bridge over Thompson River, ke Lemoine Narrows, gravel fill, approaches, tibi Co., to La Societe d' Enterprises neralea, Ltd., **Amos. $37,203.** CD 9/16—NR 9/25.

STREETS AND ROADS

DS ASKED

Bids Asked November 3

Connecticut—State Hy. Comn., W. J. Cox, mr., Hartford, bit. concrete surfacing 715 ft. ute 20, Scantic River Bridge, Somers; grad- , drainage 7,500 ft. Hartford Bypass Route to Folly Brook Blvd., Wethersfield. Over 5,000.

Bids Asked November 4

Iowa—State Hy. Comn., Ames, grading 303 mi. Deloit-Boyer Rd., N.E., FAS-524-A 0), Crawford Co.; gravel surfacing 5.196 mi. unty Trunk Rd. L, etc., FM-7; 2.605 mi. unty Trunk Rd. O, F-54, both Adair Co.; 349 mi. Iowa 184, FA-864-B(1), Fremont ; 3.94 mi. Iowa 217, FN-253-D, Harrison ; 1.859 mi. Iowa 244, FN-819-A, Mills Co.; 11 mi. Iowa 191, FN-521-A, Shelby Co.; 334 mi. Iowa 344, FN-812-A, Taylor Co.; 242 mi. County Trunk Rd. J, FM-30, Ply- outh Co. F. R. White, Ames, Ia., engr.

Bids Asked November 5

Michigan—State Hy. Dpt., Escanaba, plac- g borrow excav., rip rap, sodding, etc. 0.118 l. SM-21-3C-3 on U. S. 2, Delta Co.; sta- lized aggregate surfacing, grading, etc. 532 mi. M-17-29C-3, M17-43C-3, M-49-27C-3, M-134 east of Cedarville, Chippewa and ackinac Counties.

Michigan—State Hy. Dpt., Lansing, grading, rainage structures, concrete surfacing 3.815 l. M-32-52C-1 on M-142, Elkton and East d., Huron Co.; 0.399 mi. M-24-32C-1 on -131, Harbor Springs, Emmet Co.; grading, rainage structures 0.527 mi. F13-28C-3 on -73, Graham Lake Sink Hole Rd., Calhoun o.; roadside landscaping 0.189 mi. F4-22C-1 n U. S. 120 23, Alpena Co.; grading, drain- ge structures, stabilized aggregate surfacing 25 mi. M-81-49C-1 on M-11, Manchester- ridgewater Rd., Washtenaw Co. 1.91 mi. AS 6-24C-1 on M-33, Alger Rd., N., Arenac o.

†**Oregon**—Pub. Roads Admin., 316 New Post ffice Bldg., Portland, clearing, grubbing, rading, surfacing Klamath Falls-Lakeview Hy., Lake Co. $180,000. Bids Sept. 17 rejected. D 9/23—ENR 9/25.

Bids Asked November 6

Nebraska—State Dpt. Road Irrigation, Lin- oln, graveling Greeley Center, Patrol 41095; mi. Stuart-Naper Rd., FAS 417-C; 7 mi. ynch Rd. S., FAS-415-C; 2.7 mi. Brewster- insworth Rd., FAS 399-F; 3.7 mi. Brewster- insworth Rd., FAS 399-E; 3.5 mi. Spaulding- ibion Rd., FAS 381-E; 6.3 mi. same road, AS 381-D; 4.3 mi. Atkinson-Butte Rd., FAS 75-B.

N. Y., Brooklyn—President Brooklyn Boro, oro Hall, asphalt repaving Blake Ave., Car- oll, Conway, E. 17, Jackson, Noll, Truxton, Water, 40, 54 and 57 Sts., permanent redressed ranite blocks, paving Green St.

Bids Asked November 7

New Jersey—E. D. Sterner, comr. State Hy. Dpt., Trenton, drainage imprvs., Rt. 3, Sect. 16, Lindenwold, Camden Co.; Rt. 47, Sect. 9, Hurffville, Gloucester Co.

★**Pennsylvania** — State Hy. Dpt., I. L. Hughes, secy., Harrisburg, rein.-con. pav- ing, 4 rein.-con. structures, bituminous on na- tive stone type A or crushed aggregate urfacing 32,427 ft. Legislative Route 149, Sect. 2, Traffic Route 422, N. Lebanon, S. Lebanon, Jackson and Marion Twps., Myers- town Boro, Lebanon and Berks Counties, ver $500,000; bituminous on type A na- tive stone or crushed aggregate surfac- ing, exten. structure 13,179 ft. Legislative Route 99, Sect. 1-A, Traffic Route 120, Ridg- way Boro, Ridgway Twp., Elk Co.; bituminous on native stone type B or crushed aggregate urfacing, 3 rein.-con. structures, selected ma- terial surfacing, relaid brick paving, 2 rein.- con. bridges 44,537 ft. Legislative Routes 20043, Sect. 1, 20038, Sect. 1, 20038, Sect. 2, 20117 and 53, Traffic Route 6, Pine, Conneaut and Summerhill Twps., Linesville and Con- neautville Boros, Crawford Co.; rein.-con. pav- ing rein.-con. structure, drainage, 6,233 ft. Legislative Route 130, Sect. 3 A, Traffic Route 1, Upper Darby Twp., Clifton Heights and Lansdowne Boros, Delaware Co. T. C. Frame, c/o State Hy. Dpt., ch. engr.

Bids Asked November 12

California—C. H. Purcell, engr., State Div. Hys., P. Wks. Bldg., Sacramento, grading, penetration treating 8 mi. hy. Kearn and Tulare Counties.

Bids Asked November 14

Tennessee—State Hy. Dpt., Nashville, surfacing 0.4 mi. State Hy. 6, Nashville-Gallatin Rd., S.A.P. 325-B, Davidson Co.; grading, drainage 3.074 mi. Hy. 10, Hartsville-LaFayette Rd. S.A.P.-W.P.A. Proj. 3752-1, Macon Co.; 5 bridges 0.051 mi. on State Hy. 62, Wartburg-Oliver Springs Rd., S.A.P.-P.L. Proj. 5016, Morgan Co.

Bids Asked

Colorado—State Hy. Dpt., Denver, rejected bids Oct. 10, imprv. 18.797 mi. Chaffee, Gunnison and Saguache Counties. CD 9/30—ENR 10/2.

†**Idaho**—Pub. Roads Admin, Ogden, Utah, rejected bids Oct 23, grading, surfacing, draining Ketchum-Clayton Forest Hy., Blaine Co. $29,000. CD 10/16.

†**Md., Annapolis**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., roads, walks, drainage sys., etc. Naval Hospital, Spec. 10674.

LOW BIDDERS

†**Arizona**—Pub. Roads Admin., San Francisco, Calif., Oct. 16, imprv. 22.722 mi. Pima Co., from Fisher Constr. Co., 516 S. 7 Ave., Phoenix. **$310,401.** CD 10/3—ENR 10/9.

California—C. H. Purcell, engr. State Hy. Dpt., Sacramento, Oct. 15, imprv. 7.3 mi. Santa Cruz Co., from Parish Bros., Box 566, Fairfax, **$334,809;** 0.4 mi. Kern Co., from G. von Kleinsmid, Box 363, Bakersfield, **$39,461.** CD 9/30—ENR 10/2.

Calif., Los Angeles—City, Oct. 22, imprv. streets, Zelzah Ave. and Vassar Ave. Impvrt. Dist., from Geo. J. Bock Co., 1120 N. Las Palmas St. **$65,260.** CD 10/8.

Calif., Oakland—City Council, Oct. 21, imprv. San Leandro Blvd., from Heafey-Moore Co., 344 High St. **$54,957.** CD 10/15.

Calif., Sacramento—Grading, asphaltic concrete paving, sewers, portions H St., from A. Teichert & Son, Inc., 1846 37 St. **$26,899.**

†**Colorado** — Pub. Roads Admin., Custom House, Denver, Sept. 30, constructing 12.961 mi. Routt Natl. Forest, Grand, Jackson and Routt Counties, from Larson Constr. Co., 2811 Walnut St., Denver. **$127,935.** CD 9/23.

Connecticut—W. J. Cox, comr. State Hy. Comn., Hartford, Oct. 20, from M. A. Gammino Constr. Co., 728 Valley St., Providence, R. I., imprv. 1,800 ft. hy. East Hartford, **$95,089;** 8,069 ft. Tolland and Willington, **$53,026;** 16,896 ft. Willington, **$135,874***** from John De Michiel & Bros., 58 High St., Torrington, 1,250 ft. Bridgewater trunk line, **$26,583***** from L. G. De Felice, 51 Alston Ave., New Haven, 5,105 ft. East Haven, **$40,204.** CD 10/9—ENR 1/16.

Idaho—A. C. Merritt, comr. P. Wks. Dpt., Boise, imprv. 4.1 mi. Tipperary Corner and J. Coulee Rds., Jerome Co., from D. Cavanaugh & Hoops Constr. Co., Twin Falls. **$112,763.** CD 10/8.

Iowa—State Hy. Comn., Ames, Oct. 21, imprv. 5.919 mi. Delaware Co., from Burch Constr. Co., 3102 Mt. Vernon St. S.E., Cedar Rapids, **$36,550;** 5.919 mi. Delaware Co., from Fred Carlson Co., Decorah, **$185,610.** CD 10/9—ENR 10/16.

Michigan—State Hy. Dpt., Lansing, Oct. 13, imprv. 1.917 mi. Washtenaw Co. and 3.004 mi. Wayne Co., from Bridgeport Core Sand Co. and T. McNally, 125 Davenport St., Saginaw, **$121,427** and **$236,807** respectively; 2.75 mi. Oakland Co., from Michigan Asphalt Paving Co., 720 E. Ten Mile Rd., Royal Oak, **$34,789.**

Mich., Belleville—Wayne Co. Road Comn., 3800 Barlum Tower, Detroit, concrete paving 3 mi. Chase Rd., vicinity of here, from Oak Constr. Co., Royal Oak. **$134,176.**

Nevada—Directors Dpt. Hys., Carson City, Oct. 16, imprv. 5.99 mi. Elko Co., from Dodge Constr., Inc., Fallon. **$159,330.** CD 10/7—ENR 10/9.

North Carolina—State Hy. & P. Wks. Comn., Raleigh, Oct. 23, imprv. 9.16 mi. Onslow Co., from Beal Bros., Bear Creek. **$44,636.** Est. **$25,000-$50,000.** 4.09 mi. Rutherford Co., from Cobb & Homewood, Inc., Chapel Hill. **$45,366.** Est. **$25,000-$50,000.** CD 10/14—ENR 10/16.

South Dakota—State Hy. Comn., H. C. Westphal, secy., Pierre, Oct. 21, imprv. 17.77 mi. Shannon Co., from Peter Kiewit Sons' Co., 1024 Omaha Natl. Bank Bldg., Omaha, Neb., and G. W. England & Son, Rapid City, S. D., **$114,143;** 10.243 mi. Davidson Co., from Trotman Bros., Miller, **$59,013.** CD 10/10.

R. I., Cranston—Bd. Contr. & Purchases, City Hall, Oct. 21, imprv. 61,000 sq. yd. Cranston St., from P. Romano & Son, 16 Franklin St., Warren. **$215,874.** CD 10/9—ENR 10/16.

†**Washington** — Pub. Roads Admin., Post Office Bldg., Portland, Oct. 15, imprv. South Fork Stillaguamish Hy., Mt. Baker Natl. Forest, Whatcom Co., from A. Osberg, Lloyd Bldg., Seattle. **$96,150.** CD 10/7.

CONTRACTS AWARDED

Calif., San Jose—Clerk Santa Clara Co., imprv. San Jose-Los Gatos Rd., and Santa Clara-Los Gatos Rd., to A. J. Raisch, 358 Lincoln Ave. **$25,032.** Bids 10/14. CD 10/3.

Calif., San Mateo—Imprv. Beresford St., etc., Laurel Park Subdivision, to Union Paving Co., 310 California St., San Francisco, $15,51.. Bids 10/20. CD 10/15.

†**Fla., Camp Blanding**—Con. Q.M., new access roads within artillery range, to H. E. Wolf Constr. Co., and L. B. McLeod, both St. Augustine, **$98,026.**

Kansas — State Hy. Dpt., Seneca, imprv. 6.291 mi. Nemaha Co., to Cook and Tucker, Ottawa, **$143,745;** 1.951 mi. Pottawatomie Co., to M. W. Watson, Natl. Bank of Topeka, Topeka, **$55,214.** Bids 10/7, awarded 10/16. CD 9/24—ENR 10/2.

Kan., Herrington—Street imprvs., **WPA. $70,000.** Paulette & Wilson, Salina, engrs.

Maryland—State Roads Comn., Baltimore, imprv. 7.39 mi. Contr. A329-611, Alleghany Co., to Cumberland Contg. Co., Cumberland. **$115,577.** Bids 10/14. CD 10/6—ENR 10/9.

Massachusetts—Dpt. P. Wks., H. L. MacDonald, comr., Boston, 1,360 sq. yd. bit. concrete paving, viaduct, Brookline, to C. Struzziery, 9 Struzziery Terrace, Roslindale. **$42,-497.** Bids 10/7.

Massachusetts — Commonwealth of Massachusetts, Metropolitan Dist. Comn., Parks Div., 20 Somerset St., traffic circle, Grove St. and West Roxbury Parkway, Brookline, to C. and R. Constr. Co., 75 Bradeen St., Roslindale. **$30,741.** Bids 10/16. CD 10/2—ENR 10/9.

Mass., Roxbury (br. Boston)—City of Boston, P. Wks. Dpt., City Hall Annex, Boston, imprv. Estey St., etc., to Baker & Co., 1335 Hyde Park Ave., Hyde Park. **$27,075.** Bids 10/9. CD 10/7.

Michigan—State Hy. Dpt., Lansing, grading, clearing, concrete paving 3 mi. Chase Rd., Van Buren Twp., Wayne Co., to Oak Constr. Co., Royal Oak. **$134,176.** Bids 10/16.

Minn., Anoka—Anoka Co., E. A. Carlson, aud., grading 1.6 mi. County Rd. G3, to Schultz-Griffis Co., 4631 Wentworth Ave., Minneapolis. **$31,694.**

Nevada—Directors Dpt. Hys., Carson City, imprv. 4.8 mi. Elko Co., to Dodge Constr., Inc., Fallon, **$159,330.** Bids 10/9. D 10/1.

N. J., Atlantic City—Grading, concrete base in track area, bituminous concrete paving streets, **WPA. $57,202.** G. R. Swinton, 930 Atlantic Ave., owner's and WPA engr.

N. J., Beach Haven—Boro, imprv. streets, sidewalks, curbs, **WPA. $62,384.**

†**N. J., Eatontown**—War Dpt., 20 St. and Constitution Ave., N.W., Wash., D. C., grading, bituminous concrete and penetration macadam surfacing, drainage sewer in Gosselin Ave. **WPA. $77,398.**

N. J., Hackensack—Bergen Co., grading, 6 in. penetration macadam pavements, curbs, etc. **WPA. $65,000.** C. Malstrom, Orange and N. 6 Sts., Newark, owner's and WPA engr.

N. J., Jersey City—Hudson Co., Court House, grading, 8 in. rein.-con. paving, **WPA. $62,000.** F. Radigan, Court House, WPA and co. engr.

N. J., Lindenwold—Grading, gravel surfacing, curbs, gutters, gravel sidewalks, **WPA. $59,716.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

†**N. J., Metuchen**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., grading shoulders, 9 mi. drainage ditches, penetration macadam surfacing, Raritan Arsenal, **WPA. $60,500.** J. H. Weltzen, Smith and Hobart Sts., Perth Amboy, WPA and owner's engr.

N. J., Newark—Grading, 3 in. macadam on 6 in. concrete surfacing, resetting curbs, etc. **WPA. $72,500.** G. Andress, City Hall, WPA and city engr.

N. J., Paulsboro—Grading, concrete sidewalks, curbs, gutters. **WPA. $60,523.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. J., Salem—23,610 ft. concrete curbs, 6 in. concrete gutters, **WPA. $54,513.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

N. Y., Brooklyn—Dpt. P. Wks., Municipal Bldg., bituminous paving, drainage at Brooklyn Terminal Market, **$53,105;** repaving on concrete fdn., various locations, **$178,910. WPA.** W. W. Johnstone, 70 Columbus Ave., New York dir. Div. Operations.

N. Y., Stapleton (sta. Staten Island)—Dpt. Docks, Pier A, North River, New York, rein.-con. paving Murray-Hulbert Ave. between Piers 11 and 17, **WPA. $67,713.** W. W. Johnstone, 70 Columbus Ave., New York, dir. Div. Operations.

Oregon—State Hy. Comn., Salem, imprv. 5.3 mi. Malheur Co., to Triangle Constr. Co., Boise, Idaho, **$69,600***** 4.85 mi. Harney Co. and 2.07 mi. Klamath Co., to Rogers Constr. Co., Dayton, **$118,252** and **$47,451** respectively

STREETS, etc. (Contracts Awarded, Cont'd.)

0.72 mi. N. Burgard St., Portland, to P. W. Yett, 6500 N. E. Ainsworth St., Portland, **$32,703**14.1 mi. Gilliam Co., to F. R. Hewett, Parkwater St., Spokane, Wash., **$63,855*furnishing crushed rock in stockpiles, Clatsop, Tillamook, Columbia and Washington Counties, to A. S. Wallace, Roseburg, **$31,770** ***in Benton Co., to A. T. Dolan, Tillamook, **$25,200.** Grand total $388,831. Bids 10/16 and 10/17. Received no bids Oct. 16, furnishing 11,400 cu. yd. crushed rock in stockpiles, Deschutes and Lane Co. Rejected bids Oct. 16, imprv. 2.22 mi. Marion Co.; 1.26 mi. Lane Co.; 0.27 mi. Multnomah Co.; 1.44 mi. Washington Co.; 2.97 mi. Umatilla Co. CD 10/8.

Pa., Wyomissing — Boro Council, grading, paving, storm and sanitary sewers, own forces. **$150,000.**

Rhode Island—State and Providence Plantations, Dpt. Finance, Div. Purchases, imprv. 2.537 mi. hy., Exeter and Richmond, to Callan Constr. Co., Gray St., Bristol. **$255,412.** Bids 9/24. CD 9/12—ENR 9/18.

Tex., Lufkin—Concrete paving, curbing, guttering, base, etc. 33,000 sq. yd. **WPA. $56,200.** Koch & Fowler, 701 Great Nat. Life Bldg., Dallas, engrs.

Tex., Palestine—Anderson Co., c/o Judge, surfacing, rebuilding 16 mi. roadway between here and Cayuga, **WPA. $82,940.**

Tex., Sinton—L. Sims, mayor, street imprvs., **WPA. $82,931.** A. Tamm, 109 1 St., Harlingen, engr.

Vermont—State Hy. Dpt., H. E. Sargent, ch. engr., Montpelier, imprv. 2.999 mi. hy. Jericho and Underhill, to R. F. Carpenter, Alburg. **$36,346.** Bids 10/10. CD 10/2.

Ont., St. Joseph's—Dominion Govt., Ottawa, grading, drainage, to Johnstone Brothers, Ltd., 43 Market St., Brantford. Est. **$40,000.** Dpt. Transport, Ottawa, engrs.

Quebec — Dpt. Roads, Quebec, grading, graveling 7.68 mi. Latbiniere sect. Hy. St. Apollinaire, to J. D. Cormier, Ltd., 175 Radisson St., Three Rivers, **$159,000;** 5.72 mi. St. Edmond de Val. Algain Rd., in Latbiniere sect., St. Emelie, to Nap. Trudel et Fils, Malbaie, **$226,500.**

EARTHWORK WATERWAYS

PROPOSED WORK

Calif., Long Beach — Richfield Oil Corp., Richfield Bldg., Los Angeles, dredging 4,000 cu. yd. material to 32 ft. below mean lower low water, north side Channel 2, and 11,000 cu. yd. treating a depth of 37 ft. below datum, north side Channel 3, Long Beach inner harbor.

†Missouri—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., 8,470 lin. ft. accretion paving in Missouri River between Quindaro and Amazon Bends, center of work near Boonville. $100,000.

N. J., Atlantic City—Yacht basin, $350,000.

N. J., Avon-by-the-Sea — State Bd. Commerce & Navigation, Trenton, building new and repairing old jetties. $32,000. O. R. Seaman, Freehold, engr.

N. J., Manasquan—State Bd. Commerce & Navigation, Trenton, building new and repairing old jetties. $100,000. O. R. Seaman, Freehold, engr.

★**†Tex., Dallas**—U. S. Eng., Federal Bldg., Galveston, dredging Barge Canal 9 ft. depth, 150 ft. bottom, from Gulf to Dallas and Fort Worth, also flood control features, upper reaches of river. $1,000,000.

★**†Tex., El Paso**—International Boundary Comn., U.S.A. and Mexico, L. M. Lawson, comr., 1st Natl. Bank Bldg., bids soon earth levees along Rio Grande River, excavating for floodways to carry waters inland, etc. $2,500,000.

†Wash., Port Angeles—U. S. Eng., Central Bldg., Seattle, dredging shoal in harbor. $10,000.

BIDS ASKED

Bids Asked November 4

Mass., Gloucester—Commonwealth of Massachusetts, Dpt. P. Wks., H. L. MacDonald, comr., Boston, dredging Gloucester Inner Harbor. Over $15,000.

Bids Asked November 5

Conn., Hartford—Mayor's Office, two 7-pile and one 5-pile dolphins, 2 single piles, Connecticut River, West Bank near Potter St., Contr. 10, for Bd. Contr. & Supply, 550 Main St. R. Ross, city engr.

†N. Y., Buffalo—U. S. Eng., E. 9 St., Cleveland, O., widening, enlarging channel and turning basin, Buffalo Harbor, 81,000 cu. yd., No. 42-29.

Bids Asked November 10

†Arizona-California — Bureau Reclamation, Custom House, Denver, Colo., furnishing, del. fabricated structural steel for disconnecting-switch supports, take-off towers, etc., for Parker power plant, Parker Dam Power Project, Spec. 1584-D.

†Fla., MacDill Field—U. S. Eng., Jacksonville, dredging approx. 630,940 cu. yd. material from Hillsboro Bay; adv. ENR 10/30.

Bids Asked November 12

†Md., Annapolis—Pub. Wks. Officer, U. S. Naval Academy, rein.-con. cap over existing steel sheet piling bulkhead, approx. 3,000 ft. long, U. S. Naval Academy.

Bids Asked November 18

†California — Bureau Reclamation, Custom House, Denver, Colo., furnishing, del. gates and hoists for diversion tunnel, Shasta Dam, Central Valley Project, Spec. 1009; adv. ENR **10/30.**

Bids Asked November 19

†Washington—Bureau Reclamation, Custom House, Denver, Colo., furnishing, del. turbines and governors for Units L-7, L-8 and L-9, Grand Coulee Power Plant, Spec. 1013; 3 penstock coaster gates for Grand Coulee Dam, Spec. 1010, Columbia River Basin Project; adv. ENR 10/30.

Bids Asked November 25

†Washington—Bureau Reclamation, Custom House, Denver, Colo., furnishing, del. hydraulic hoists for three penstock coaster gates for Grand Coulee Dam, Columbia Basin project, Spec. 1012; adv. ENR 10/30.

Bids Asked November 27

†Arizona-California-Nevada—Bureau Reclamation, Custom House, Denver, Colo., furnishing, del. 1 or 2 168 in. butterfly valves for Unit N-7 or Units N-7 and N-8, Boulder power plant, Boulder Canyon Project, Spec. 1011; adv. ENR 10/30.

LOW BIDDERS

★**†California** — Bureau Reclamation, Old Post Office Bldg., Sacramento, Oct. 17, clearing portion Shasta Reservoir site, Kennett Div., Central Valley Project, Spec. 977, from Wixson & Crowe, P. O. Box 799, Redding. **$1,270,000.** CD 10/6—ENR 10/9.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, repairing San Diego River diversion dike, from V. R. Dennis Constr. Co., P. O. Box F, Hillcrest Sta., San Diego. **$18,410.** CD 10/8.

†Calif., Bodega—U. S. Eng., 401 Customhouse, San Francisco, Oct. 15, 2 jetties, bulkhead, entrance Bodega Bay, Inv. 868-42-49, from Piombo Bros., 1571 Turk St., San Francisco. **$307,700.** Engrs. $311,670. CD 10/3.

†Calif., San Diego — U. S. Eng., 751 S. Figueroa St., Los Angeles, Oct. 20, dredging 408,700 cu. yd. material, San Diego Harbor, from Standard Dredging Co., Central Bldg., Los Angeles. **$102,172.** alt. **$76,590.**

†Colorado — Bureau Reclamation, Custom House, Denver, Colo., Oct. 20, diversion and outlet tunnel, Granby Dam, Colorado-Big Thompson Project, Spec. 999, from Platt Rogers, Inc., P. O. Box 153, Pueblo. **$283,180.** CD 9/30—ENR 10/2.

★**†Colorado** — Bureau Reclamation, Customhouse, Denver, Oct. 20, Granby Dam, from Peter Kiewit Sons Co., George W. Condon Co., W. E. Callahan Constr. Co., Gunther & Shirley Co., 714 W. Olympic Blvd., Los Angeles, Calif., **$5,133,837.** CD 9/30—ENR 10/2.

†Florida—U. S. Eng., Jacksonville, Oct. 17, dredging 2,069,000 cu. yd. shoal material from St. Johns River, from Sternberg Dredging Co., Arcade Bldg., St. Louis, Mo. **$361,346.** CD 9/30—ENR 10/2.

†Illinois—U. S. Eng., Clock Tower Bldg., Rock Island, Oct. 15, imprv. levees along both sides Ellison Creek, Henderson Co., D.D. 2, Henderson Co., from Nielsen Bros., Onawa, Ia., **$15,028.** CD 10/6—ENR 10/9.

†Louisiana—U. S. Eng., P. O. Box 60, Vicksburg, Oct. 21, approx. 300,000 cu. yd. earthwork, east bank Mississippi River, East Carroll Parish, Inv. 1106-42-50, from Edward E. Morgan Co., Inc., Jackson, Miss., **19.3c.** per cu. yd. CD 10/3—ENR 10/9.

†Minnesota—U. S. Eng., P. O. and Custom House, St. Paul, Oct. 14, constructing Marsh Lake Dam imprvs. and stage recorder house, Lac qui Parle Dam Lac qui Parle Reservoir, Minnesota River, from Adolphson-Huseth Co., Thief River Falls. **$31,246.** CD 10/9.

N. H., Hampton—State Hy. Dpt., Concord, Oct. 23, seawall, from New England Foundation Co., Inc., 38 Chauncy St., Boston, Mass. **$154,923.** CD 2/26—ENR 3/6, under Hampton Beach.

O., Cleveland—F. Foy, city purch. agt., 1,600 ft. stone bulkhead, from L. A. Wells Constr. Co., Schofield Bldg. **$220,990.** J. M. Heffelfinger, 518 City Hall, engr.

†Washington — Bureau Reclamation, Yakima, Oct. 23, earthwork, concrete lining, structures, Roza Div., Yakima Ridge Canal, near Sunnyside, Spec. 997, from H. L. Horn, Caldwell, Idaho. **$217,785.** CD 9/30—ENR 10/2.

CONTRACTS AWARDED

Calif., Buttonwillow — Buena Vista Water Storage Dist., reconstructing concrete well, to A. E. Deyo, Fresno. $1[illegible]28.

N. Y., New York—Dpt. Hospitals, 125 Worth St., reconstructing seawalls, various locations on east and west channels, renovating bridge connecting main and service bldgs. of city hospital, Welfare Island. WPA. **$80,346.** W. Johnstone, 70 Columbus Ave., dir. Dpt. Operations.

Pa., Wilkes-Barre—L. K. Eldridge, city clk., elevating concrete walls along Solomon Creek for flood control between Vulcan and Brooks Sts., own forces. $28,500. G. [illegible] Walker, city engr. CD 10/8—ENR 10/16.

★**†Wash., Port Angeles**—U. S. Eng., Central Bldg., Seattle, breakwater, Neah Bay, near here, to Guy F. Atkinson Co., Rialto Bldg., San Francisco, Calif., and Kern & Kibbe, 42 S.E. Salmon St., Portland, Ore. **$1,696,800.** Est. $1,141,000. Bids 10/6. CD 10/9—ENR 10/16.

Ont., Fort Erie—Niagara Parks Comn., Victoria Park, Niagara Falls, 2,000 ft. seawall exten. along Niagara River, to Aiken & MacLachlan Ltd., 9 Queen St., St. Catharines. **$28,000.**

UNCLASSIFIED

PROPOSED WORK

Ark., Pine Bluff—PARK IMPROVEMENTS —Pine Bluff Park Bd., park imprvs. $25,000. H. Rudder, engr.

†Calif., Victorville—GASOLINE FUELING SYSTEM—U. S. Eng., 751 S. Figueroa St., Los Angeles, postponed indefinitely bids to have been opened Oct. 27, A.C. gasoline fueling system, Victorville Airport. CD 10/22.

Colorado—RURAL ELECTRIC LINES—Red Cross Electric Assn., Inc., Basalt, soon lets contract, 197 mi. transmission lines. $176,000. Rocky Mountain Eng. Co., 1425 Welton St., Denver, engrs. CD 8/8—ENR 8/21.

Idaho, Coeur D'Alene—LANDING STRIPS, etc.—U. S. Eng., Pittock Blk., Portland, Ore., bids soon landing strips, paving runway, airport. $401,000. CAA. CD 7/1—ENR 7/10.

Illinois—ELECTRIC POWER LINES—Illinois Iowa Power Co., Champaign, 60 mi., 69,000 v. line from substation near Collinsville, south and east to Centralia, 34,500 v. line exten. from Oglesby substation north to La Salle and east to Ottawa, 3.1 mi. 33,000 v.l. serving Scott Field, near Belleville, in Madison, St. Clair, Christian and La Salle Counties, I. Buys, Champaign, ch. engr.

Illinois—RURAL ELECTRIC LINES—Jo-Carroll Electric Co-operative, Inc., Elizabeth, 134 mi. rural electric transmission lines, Jo Daviess and Carroll Counties. $110,000. REA. Caldwell Eng. Co., Jacksonville, engrs. CD 10/16—ENR 10/23.

Ill., Marseilles—FLASHING LIGHT SIGNALS, etc.—Chicago, Rock Island & Pacific R.R., La Salle St. Station, Chicago, W. H. Hillis, asst. ch. operating official, installing electrically-operated flashing light signals, short arm gates, at grade crossings, with Main, Aurora, Pearl, Chicago and La Salle Sts. $30,000.

Iowa — TRANSMISSION LINES — Benton County Electric Co-operative Assn., Vinton, 160 mi. transmission lines. $123,000. REA allot. A. W. Grubb, Vinton, engr. CD 10/12.

Md., La Plata—RURAL ELECTRIC LINES — Southern Maryland Tri-County Co-Op. Assoc., La Plata, additional generating facilities, St. Mary's Co. $35,000. REA.

★**†Md., Sparrows Point**—SHIPWAYS—Bethlehem Sparrows Point Shipbuilding Co., bids in November 3 steel, concrete shipways and shop bldg. for U. S. Maritime Com., 14 St. between E St. and Constitution Ave. N.W., Wash., D. C. $2,000,000. CD 9/2—ENR 9/4.

Minnesota—RURAL ELECTRIC LINES—South Central Electric Assn., St. James, E. C. Meier, supt., 114 mi. rural electric transmission lines, Cottonwood, Watonwan, Martin, Blue Earth, Jackson and Redwood Counties. $110,000. Banister Eng. Co., 1586 University Ave., St. Paul, Minn., engrs. CD 10/14—ENR 10/16.

Missouri — RURAL ELECTRIC LINES — Boone County Co-operative Electric Assn., Columbia, R. A. Dinwiddie, mgr., 126 mi. rural electric transmission lines and 100 connections. $179,000.

Missouri—TRANSMISSION LINES—Southwest Electric Co-operative, Bolivar, D. L. Alexander, supt., 320 mi. transmission lines. $300,000. REA allot. Midwestern Eng. & Constr. Co., McBirney Bldg., Tulsa, Okla., engrs.

†Mo., Joplin—LANDING FIELD IMPROVEMENTS—U. S. Eng., Wright Bldg., Tulsa, Okla., landing field imprvs. of airport, Inv. 957-42-42. CD 10/9—ENR 10/16.

NCLASSIFIED (Proposed Work, Cont'd.)

Mont., Bozeman—RUNWAYS—U. S. Eng., ort Peck bids soon, 2 runways, airport, $35,000. CAA.

Mont., Helena—RUNWAY—U. S. Engr., Fort eck, bids in November, runway, municipal irport, $144,000. CD 10/20—ENR 10/23.

N. H., Newbury—TRAMWAY—State, Aerial ramway Comn., J. C. MacLeod, chn., State ouse, Concord, preliminary estimates ordered erial tramway, Mt. Sunapee. $275,000. CD 9/14/40—ENR 10/17/40.

N. J., Audubon—PARK IMPROVEMENTS—amden Co. Park Comn., Court House, Camden, excavating, swamp reclamation, drainge, paths, landscaping, etc., Haddon Lake ark. $182,429. WPA. G. R. Swinton, 930 tlantic Ave., Atlantic City, owner's and PA engr.

†**N. J., Audubon** — LANDSCAPING — Pub. ldgs. Admin., 7 and D Sts. S.W., Wash., D. C., landscaping 80 acres, incl. artificial pool nd lake. $50,894. WPA.

N. J., Bridgeton—ATHLETIC FIELD IMROVEMENTS—Athletic field imprvs., grad-g, concrete bleachers, concrete surfacing 4 ennis courts, etc. $70,845. WPA. G. R. winton, 930 Atlantic Ave., Atlantic City, wner's and WPA engr.

†**N. J., Dover**—RAILROAD—War Dpt., 20 t. and Constitution Ave. N.W., Wash., D. C., arrow gage and standard gage railroads with allast, ties, etc., Picatinney Arsenal, $76,763. WPA. Carl Malstrom, Orange and N. 6 Sts., Newark, WPA and owner's engr.

†**N. J., Fort Dix**—RAILROAD, etc.—Con. Q.M., 8 mi. narrow gage railroad with ballast, ties, rails, etc. $51,219. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

†**N. J., Fort Monmouth**—LANDSCAPING—Con. Q.M., landscaping, excavating, grading, 62,500. WPA. W. D. Cougle, 1102 S. Broad St., Trenton, WPA and owner's engr.

N. J., Harrison—STADIUM—Concrete, steel stadium, $156,000. Applied for DPW funds.

★†**N. J., Hoboken**—PIERS and BULKHEADS—Tietjen & Lang Dry Dock Co., 1 Bway., New York, N. Y., plans and specifications complete piers and bulkheads, for Navy Dpt. Defense Plant Corp. will finance. Frederick R. Harris, Inc., 27 William St., New York, N. Y., engr. CD 7/31—ENR 8/7.

†**N. J., Pedricktown**—GROUND IMPROVEMENTS—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., clearing, grading, filling swamplands, rehabilitating railroads, etc., Delaware Ordnance Depot, $60,500. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

†**N. J., Salem**—PIER—War Dpt., 20 St. and Constitution Ave. N.W., renovating pier with wood piling, new decking, etc., at Fort Mott. $107,869. WPA. G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr.

New York—TRANSMISSION LINES—Niagara, Lockport & Ontario Power Co., Electric Bldg., Buffalo, electric transmission line from Little Valley to Ellicottville. $25,000.

★†**N. Y., Brooklyn**—PIERS and BULKHEADS—Todd Shipyards Corp., 1 Bway., New York, plans and specifications complete piers and bulkheads for floating drydock, for Navy Dpt. Defense Plant Corp. will finance. Frederick R. Harris, Inc., 27 William St., New York, engrs. CD 7/16—ENR 7/24.

N. Y., Forestville—PARK—Hanover Twp. Supervs., Forestville, municipal park, bathing beach, recreation facilities, etc., along south shore of Lake Erie, site known as Sunset Bay. Over $25,000.

Ohio—RURAL ELECTRIC LINES—Belmont Electric Co-operative, Inc., H. McAllister, supt., St. Clairsville, 101 mi. rural electric lines, Monroe, Harrison, Jefferson, Belmont, Guernsey and Tuscarawas Counties. $117,000 REA gr. CD 11/28—ENR 12/12.

Ohio — RURAL ELECTRIC LINES — Firelands Electric Co-operative, Inc., North Fairfield, rural electrification, Richland and adjacent counties. $82,000 REA allot.

Ohio—RURAL ELECTRIC LINES—Midwest Electric Co-operative, Inc., T. R. Kern, supt., St. Marys, 28.9 mi. electric lines, Auglaize, Mercer, Allen and Van Wert Counties. $46,000 REA gr.

Oklahoma—NATURAL GAS LINE — Okla. Natural Gas Co., 624 South Boston St., Tulsa, 24 mi. 4 in. high pressure natural gas pipe lines from Tulsa to Sperry and Skiatook. $32,000.

Okla., Chickasha — POWER LINES—SW Light & Power Co. Lawton, 6 mi. addnl. power lines from Chickasha to new airport, 6 mi. south of here. $25,000.

Ore., Astoria—SHIPWAYS—Columbia Drydock & Shipbuilding Corp., Astoria, 3 shipways. Over $40,000.

Ore., Eugene—RUNWAY—U. S. Eng., Pittock Blk., Portland, runway, airport. $113,000. CAA.

Ore., Medford — RUNWAY — H. S. Deuel, mayor, City Hall, runway imprvs. $67,773. Seeking WPA funds.

Ore., The Dalles—TAXIWAYS—U. S. Eng., Pitttock Blk., Portland, grading, draining, paving taxiways, airport. $180,000. CAA.

Ore., The Dalles—RURAL ELECTRIC SYSTEM — Wasco Electric Co-operative, The Dalles, exten. rural electric distr. sys. $90,000.

★**Pa., Erie** — COAL DUMPING PLANT — Pennsylvania R.R.Co., Broad St. Sta., Phila., C. I. Leiper, ch. engr. (Central Region), Penna. Sta., Pittsburgh. Tripling facilities, new bldgs., etc. coal dumping plant, foot of Plum St., Lake Erie Harbor. $2,000,000.

Pa., Titusville—AIRPORT—Airport, near here. Over $75,000. CAA. J. M. Fay, city engr.

Tenn., Chattanooga—STADIUM—Hamilton Co. Bd. Educ., concrete stadium, Soddy-Daisy School. $40,000.

★**Texas** — RURAL ELECTRIC LINES — Farmers Electric Generating Co-operative, Inc., Gilmer, rural electric lines. $1,450,000. REA. Freese & Nichols, Capps Bldg., Fort Worth, engrs.

Texas—RURAL ELECTRIC LINES—Lamb County Electric Co-operative, Littlefield, soon lets contract 201 mi. rural electric lines, Hockley, Lamb and Hale Counties. $103,000. H. N. Roberts, 2415 20 St., Lubbock, engr. CD 10/17—ENR 10/23.

Texas — RURAL ELECTRIC LINES — Victoria County Electric Co-operative, Victoria, 96 mi. rural electric power transmission lines, Calhoun Co. $70,000. REA allot. Beavers & Lodal, Smith-Young Tower, San Antonio, engrs.

Tex., Arlington—AIRPORT, etc.—Cities of Fort Worth and Dallas, airport and facilities, runway, field, ground development, near here. $490,000 CAA funds allot. Barniff Airways and American Airways, Love Field, Dallas, lessee.

Tex., Laredo—AIRPORT IMPROVEMENTS—U. S. Eng., Federal Bldg., Galveston, airport imprvs., hard paved runways, drainage, grading, leveling expanded area, etc. $150,000. CAA.

★†**Wash., Galena**—AIR CORP. SUPPLY DEPOT—U. S. Eng., Central Bldg., Seattle, bids soon grading, later on runways, gasoline storage, bldgs., etc. army air supply depot. $20,000,000. CD 9/22—ENR 9/25.

Wash., Spokane — AIRPORT RUNWAY — U. S. Eng., Pittock Blk., Portland, Ore., bids soon paving, draining, lighting runway, airport. $194,000. CAA.

Wash., Walla Walla—RUNWAY—U. S. Eng., Pittock Blk., Portland, Ore., exten. runway, airport. $59,000. CAA.

Wash., Wenatchee—RUNWAY, etc.—U. S. Eng., Central Bldg., Seattle, runway and taxiway, airport. $210,000. CAA.

Wisconsin—RURAL ELECTRIC LINES—Marathon-Portage Elec. Co-operative, Inc., Ringle, soon lets contract, 214 mi. electrical distr. sys., Marathon and Portage Counties, REA Wis. 2062A1-Portage. Wisconsin Development Auth., 110 E. Main St., Madison, engr. CD 10/8—ENR 10/16.

Wyoming — RURAL ELECTRIC LINES — Carbon Power & Light Co., Saratoga, 240.6 mi. transmission lines, Carbon Co. $314,000 REA allot. W. W. Flora, Cheyenne, engr. CD 10/14—ENR 10/16.

Alta., Dewinton — FLYING SCHOOL — Dominion Govt., Ottawa, Ont., flying school bldgs. $150,000. Dpt. Air Defense, Ottawa, Ont., archts. Dpt. Munitions & Supply, Ottawa, Ont., engrs.

Alta., Edmonton—DEPOT—Dominion Govt., Ottawa, Ont., additional bldgs., No. 3, Manning Depot. $150,000. Dpt Air Defense, Ottawa, Ont., archt.

Alta., Edmonton—GAS PIPELINES—North Western Utilities, Ltd., Edmonton, 7 mi. gas pipeline for transmission sys. $450,000.

B. C., Prince Rupert—ARENA—Municipality, arena and civic centre. $30,000. F. N. Good, City Hall, engr. Architect, c/o Dr. R. G. Large, City Hall.

N. B., Moncton—STREET LIGHTING SYSTEM—Moncton Electric & Gas Co. Ltd., 700 Main St., street lighting sys. $30,000.

N. S., Reserve—RUNWAY EXTENSIONS—Dominion Govt., Ottawa, Ont., runway exten. $100,000. Dpt. Munitions & Supply, Ottawa, Ont., engrs.

Ont., Brockville — AIRPORT — Dominion Govt., Ottawa, airport development. $100,000. Dpt. Transport, Ottawa, engr.

Ont., Welland—ICE ARENA—Civic Athletic Comn., c/o J. D. Watt, city clk., artificial ice arena. $30,000.

BIDS ASKED

Bids Asked November 3

N. Y., New York—BORINGS—Superintendent School Bldgs., and Constr., 49 Flatbush Ave. Exten., Brooklyn, test borings and subsoil exploration for proposed West Bronx Vocational High School, Belmont Ave. and E. 181 St., from Belmont Ave. through to Crotona Ave., Bronx Boro. CD 7/1—ENR 7/10, under Public Bldgs.

N. Y., New York—DUMPING BOARD—President Manhattan Boro, Municipal Bldg., Marginal St. imprvs., E. 30 to E. 49 Sts., sanitation dumping board with ramp, between E. 31 and E. 33 Sts., East River, Contr. 40 A, B, C, D. Extended date. CD 10/14—ENR 10/16.

Bids Asked November 4

†**Kan., Kansas City**—GASOLINE FUELING SYSTEM—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., Air Corps gasoline fueling sys., for Fairfax Airport. Over $25,000.

R. I., Cranston—FIELDHOUSE—Bd. Contr. & Purchases, City Hall, brick fieldhouse containing transformer, recreation field.

Bids Asked November 5

Pennsylvania — TRANSMISSION LINES — Adams Electric Co-operative, Gettysburg, C. A. Gluck, supt., 396 mi. rural electric distr. lines, Franklin, Cumberland and York Counties. Gibbs & Hill, Inc., 600 N. 2 St., Harrisburg, engrs. CD 10/7—ENR 10/9.

Bids Asked November 6

†**N. Y., Babylon** — STEEL TOWER and SHELTER—U. S. Eng., 17 Battery Pl., New York, steel tower and shelter, Jones Beach, and steel observation tower and shelter at Short Beach, west of Jones Beach, Inv. 1097-42-115.

†**Tex., Waco**—HANGARS—U. S. Eng., Federal Bldg., Galveston, 2 A.C. Hangar (184 ft. demountable) Bldgs., Basic Flying School. CD 10/23—ENR 10/30.

†**W. Va., Huntington**—SUBSTATION, etc.—U. S. Eng., Huntington, electric substation, transmission and distr. lines for Sect. 1, Local Protection Project; adv. ENR 10/30.

Bids Asked November 7

Kansas—TRANSMISSION LINES—N. C. K. Rural Electric Co-operative Assn. Inc., Belleville, 173 mi. transmission lines. $125,000. REA. Raymond H. Reed & Co., 208½ N.W. 2 St., Abilene, engrs.

†**N. M., Clovis**—AIR NAVIGATION FACILITIES—U. S. Eng., Caddoa, Colo., air navigation facilities, Serial No. W 911-42-14. CD 10/16—ENR 10/23.

Bids Asked November 8

†**Md., Middle River** — TRAILER PARK — Farm Security Admin., The Mall between 12 and 14 Sts. S.W., Wash., D. C., trailer park development, electric distr. lines, sewerage sys., water sys., grading, roads, walks, etc. $50,000.

Bids Asked November 12

Mo., Joplin—AIRPORT—U. S. Eng., Tulsa, Okla., airport imprvs. CAA. CD 10/23.

Tex., Gilmer—SUBSTATIONS, etc.—Farmers Electric Co-operative, c/o H. P. McGaughy, pres., Gilmer, 8 sub-stations, transformers, cyclone fence, etc. Freese & Nichols, Capps Bldg., Fort Worth, engrs.

Bids Asked November 14

Wash., Goldendale — RURAL ELECTRIC LINES — Pub. Utility Dist., Court House, 354 mi. transmission and distr. line, Klickitat Co. $325,000. Colville Eng. Co., Colville, engr. CD 8/6—ENR 8/21.

Bids Asked November 15

Indiana — RURAL ELECTRIC LINES — Greene County REMC, Bloomfield, 200 mi. rural electric lines, northwest Lawrence Co. $165,000. REA.

Bids Asked About November 20

Tex., Tyler — AIRPORT IMPROVEMENTS—U. S. Eng., Citizens Bank Bldg., Denison, city mgr., airport imprvs., grading, runway, etc. $363,000. CAA. CD 9/17—ENR 9/25.

Bids Asked About November 25

Kansas—TRANSMISSION LINES—Allen Co. Co-op. Power & Light Co., Iola, 225 mi. transmission lines, $207,000. Paulette & Wilson, 1006 Kansas Bldg., Topeka, engr.

Bids Asked

†**Md., Annapolis**—SEEDING, etc.—Yards & Docks Navy Dpt., 18 St. and Constitution Ave., N.W., Wash., D. C., grading, seeding additional fill, Naval Hospital, Spec. 10672.

†**Mass., Boston**—DOCK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., concrete graving dock, inside cellular steel sheet pile cofferdam, incl. concrete dock structure, backfilling, etc. Spec. 10717.

LOW BIDDERS

La., New Orleans—AIRPORT—U. S. Eng., foot of Prytania St., Oct. 20, clearing, grubbing Kenner Airport site, from P. Freitag, 1572 Atlantic Ave., Brooklyn, N. Y. **$109,400.** Est. $150,038. CAA. CD 10/3—ENR 10/9.

†**O., Cleveland**—APRON—National Advisory Com. for Aeronautics, Langley Field, Hampton, Va., Oct. 10, concrete apron, Cleveland Airport, from Lombardo Bros. Constr. Co., 1770 E. 11 St. **$34,250.** CD 10/6.

†**R. I., Quonset Point**—NAVAL STATION IMPROVEMENTS—Con. Q.M., Quonset Point, Oct. 22, pier, roads etc., Hope Island, Naval Air Station, Spec. 10620, from Merritt-Chapman & Scott Corp., 292 Pequot Ave., New London, Conn., **$141,639.** CD 10/20.

UNCLASSIFIED (Low Bidders, Cont'd.)

Wash., Tacoma—OIL CIRCUIT BREAKERS —City, Oct. 15, furnishing three 110 kilovolt and two 69 kv. oil circuit breakers for substation enlargement, from Home Electric Co., 1316 A St. **$61,098.**

N. S., Shelburne—NAVAL STATION—Dpt. P. Wks., Ottawa, Ont., Oct. 10, Naval Station, from M. A. Condon, Aberdeen St., Kentville. About **$300,000.** CD 10/5.

CONTRACTS AWARDED

†Ala., Selma—ADVANCED FLYING SCHOOL IMPROVEMENTS—U. S. Eng., Mobile, storm drainage sys., Advanced Flying School, to J. B. Owens Excavating & Grading Co., 4011 1 Ave. N., Birmingham. **$133,165.** Bids 10/6, awarded 10/13. CD 10/3.

†Calif., Fresno—AIRPORT—U. S. Eng., Sacramento, changing from asphalt to concrete surfacing runways, Fresno Airport, to N. M. Ball Sons 852 Carmel St., Berkeley. **$302,105.** Awarded 10/14.

Calif., Fullerton—TANK—Southern Counties Gas Co., 207 W. 2 St., Santa Ana, steel tank for gas storage, to Chicago Bridge & Iron Wks., 608 S. Hill St., Los Angeles, approx. **$60,000.**

†Calif., Lemoore—FLYING SCHOOL—U. S. Eng., 208 Post Office Bldg., Sacramento, supplemental contract additional bldgs., facilities, Flying School, near here, to L. Franceschi Constr. Co., 465 Avila St., San Francisco, **$142,600.** Additional to CD 7/9—ENR 7/17 under CA.

★**†Calif., Los Angeles**—AVIATION BASE FACILITIES—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., additional facilities, naval reserve aviation base, Contr. No. 4824, to R. E. Campbell, 316 E. Weber St., Compton. **$1,425,000.**

†Calif., Marysville—AIRPORT—U. S. Eng., 208 Post Office Bldg., Sacramento, landing strips, etc., Marysville Airport, to J. A. Casson Co., Hayward. **$244,865.** Awarded 10/11.

†Calif., Merced—GRADING—U. S. Eng., 208 Post Office Bldg., Sacramento, grading cantonment area, Merced Field, to Union Paving Co., 310 California St., San Francisco. **$44,059.**

★**†Calif., Santa Ana**—AIR CORP TRAINING CENTER—U. S. Eng., 751 S. Figueroa St., Los Angeles, temporary bldg., Army Air Corp Training Center, to Griffith Co., Los Angeles Ry. Bldg., Los Angeles. **$2,016,181.** Awarded 10/18. CD 10/15—ENR 10/23, under LB.

†Fla., Orlando—AIRPORT BUILDINGS—U. S. Eng., Box 4970, Jacksonville, temporary bldgs., etc., Orlando Airport, to J. L. Ewell, Lakeland. **$110,995.** Bids 10/15. CD 10/7—ENR 10/9.

Fla., Vero Beach—RUNWAYS, etc.—U. S. Eng., Jacksonville, runways, landing strips, relocating hangar, installing underground ducts, airport, to Ebersbach Constr. Co., Stovall Office Bldg., Tampa. **$193,035.** CAA.

†Ga., Albany—RUNWAYS, etc.—U. S. Eng., Atlanta, widening runways, taxi strips, etc., airport, to W. F. Scott Co., Thomasville. **$112,131.**

†Ga., Camp Stewart—STADIUM—Con. Q.M., athletic stadium, to H. I. Flynn, Montgomery, Ala. About **$55,000.**

†Ill., Chanute Field (Rantoul)—SPORTS ARENA—U. S. Eng., P. O. Box 59, Louisville, Ky., sports arena, to Buesching Bros. Constr. Co., 219½ E. Berry St., Fort Wayne, Ind. **$86,365.** Bids 9/24. CD 9/9—ENR 9/11.

★**†La., Morgan City**—DRYDOCK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N. W., Wash., D. C., 18,000 ton steel floating drydock, to Chicago Bridge & Iron Co., 1305 W. 105 St., Chicago, Ill., **$2,234,700.**

†Me., Old Town—LANDING STRIPS, etc.—U. S. Eng., Park Square Bldg., Boston, Mass., landing strips, etc., Old Town airport, to W. W. Hinman, North Anson. **$248,776.** Awarded 10/18.

★**†Md., Fairfield (Sta. Baltimore)**—DRY DOCK, etc.—Maryland Dry Dock Co., dry dock, facilities, for Navy Dpt., to Dravo Corp., Neville Island, Pittsburgh, Pa. Est. **$2,000,000.** J. E. Greiner Co., 1201 St. Paul St., Baltimore, engrs. CD 7/31—ENR 8/7.

Minn., Minneapolis—HANGAR, etc.—Bd. Park Comrs., 325 City Hall, general contract 2 story, 44 x 147 ft. and 29 x 80 ft. rein.-con. hangar addn. for office and shops, 34 Ave. S. and 62 St., to Campbell-Lowrie, Lautermilch Corp., 400 W. Madison St., Chicago, Ill. **$60,000.**

N. J., Camden—PARKS—Camden Co. Park Comn., Court House, imprvs. parks, grading, landscaping, etc. **WPA. $105,000.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, WPA and owner's engr. CD 5/2—ENR 5/8.

N. J., Camden—PARKS—Camden Co. Park Comn., Court House, excavating, grading, landscaping picnic grounds, drainage, etc., parks. **WPA. $89,000.** CD 3/20—ENR 4/3.

N. J., Egg Harbor and **Galloway**—AIRPORT PAVING, etc.—City of Atlantic City, City Hall, Atlantic City, grading, 51,167 cu. yd. 4 in. gravel runways, airport. **WPA. $75,000.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr. CD 10/21—ENR 10/23.

N. J., Magnolia—ATHLETIC FIELD PLAYGROUND—Grading, landscaping, etc., athletic field and playground. **WPA. $50,411.** G. R. Swinton, 930 Atlantic Ave., Atlantic City, owner's and WPA engr.

★**†N. J., Hoboken**—DRYDOCKS—Tietjen & Lang Dry Dock Co., 1 Bway., New York, N. Y., 2 floating drydocks, for Navy Dpt., to Foundation Co., 120 Liberty St., New York, N. Y. Est. **$3,500,000.** Defense Plant Corp. will finance. Frederick R. Harris, Inc., 27 William St., New York, N. Y., engr. CD 7/31—ENR 8/7.

★**†N. J., Jersey City**—PIER, TRESTLE, etc. —U.S. Eng., 1st and Douglas St. N.W., Wash., D. C., pier, trestle, roadways, railroad, utilities for shipment lend-lease supplies, Jersey City Shipping Terminal, Upper Bay, New York Harbor, to Frederick Snare Corp., 114 Liberty St., New York, N. Y. **$2,077,624.** CD 8/19—ENR 8/21.

N. J., Newark—UNDERGROUND DUCTS—Underground ducts for traffic light signals, 86 locations, **WPA. $91,470.** C. Malstrom, Orange and N. 6 Sts., owner's and WPA engr.

N. J., Nutley—LOADING PLATFORM, etc. —Hoffmann La Roche, Inc., Kingsland Rd., concrete, steel, glass loading platform and canopy, Kingsland Rd., to White Constr. Co., 95 Madison Ave., New York, N. Y. **$40,000.** Fellheimer & Wagner, 155 E. 42 St., New York, N. Y., archts. and engrs.

N. M., Las Vegas—LANDING STRIPS, etc. —U. S. Eng., Fort Worth, Tex., landing strips, runways, etc., Las Vegas Airport, to H. Thygesen & Co., Inc., Albuquerque. **$293,328.** CAA. Awarded 10/18.

★**†N. Y., Brooklyn**—DRY DOCK—Todd Shipyards Corp., 1 Bway., New York, 18,000 ton steel floating drydock, Brooklyn Yards, for Navy Dpt., to Harris Structural Steel Co., 419 4 Ave., New York. Est. **$2,000,000.** Defense Plant Corp. will finance. Frederick R. Harris, Inc., 27 William St., New York, engrs. CD 7/16—ENR 7/24.

★**N. Y., Brooklyn**—PARKS, PLAYGROUNDS, etc.—Dpt. Parks, Arsenal Bldg., Central Park, 64 St. and 5 Ave., New York, reconstructing Red Hook Park and playground, **$253,225;** playground, comfort station, Park Ave. between Nostrand and Marcy Aves., **$100,880,** CD 11/25—ENR 11/28; playground, comfort station, Fulton, Truxton and Sackman Sts., **$200,178. WPA.** Grand total $554,283. W. W. Johnstone, 70 Columbus Ave., New York, dir. Div. Operations.

N. Y., Glendale—PLAYGROUND, etc.—Dpt. Parks, Arsenal Bldg., Central Park, 5 Ave. and 64 St., New York, playground and comfort station, Central Ave., 70 to 71 Sts. **WPA. $89,629.** W. W. Johnstone, 70 Columbus Ave., New York, dir. Div. Operations. CD 11/26/40 —ENR 11/28/40.

N. Y., Jamaica—COMFORT STATIONS—Dpt. Parks, Arsenal Bldg., Central Park, 64 St. and 5 Ave., New York, 2 comfort stations, Union Hall and 160 St. and Brinkerhoff and 109 Sts. **WPA. $171,114.** W. W. Johnstone, 70 Columbus Ave., New York, dir. Div. Operations.

N. Y., Long Island City—PLAYGROUND—Dpt. Parks, Arsenal Bldg., Central Park, 64 St. and 5 Ave., playground, 45 Rd. and 45 Ave. **WPA. $103,038.** CD 10/24/40—ENR 11/7/40.

N. Y., New York—ATHLETIC FIELD, etc. —Dpt. Parks, Arsenal Bldg., 64 St. and 5 Ave., athletic field, field house, Bedford Park Blvd., **$323,043;** paving, paths, etc., Eastern Blvd., Eastchester Bay, Hutchinson River and Long Island Sound, Pelham Bay Park. **$86,616. WPA.** W. W. Johnstone, 70 Columbus Ave., dir. Div. Operations.

N. Y., New York—BOAT HOUSE, etc.—Park Dpt., Arsenal Bldg., Central Park, 64 St. and 5 Ave., boat house, Sect. 1, Inwood Hill Park, W. 218 St. and Indian Rd. **WPA. $62,571.** W. W. Johnstone, 70 Columbus Ave., dir. Div. Operations. CD 10/24/40—ENR 11/7/40.

N. Y., New York—PLAYGROUND—Bd. Educ., 110 Livingston St., Brooklyn, general alterations and additional construction playground area P.S. 83. **WPA. $96,065.** W. W. Johnstone, 70 Columbus Ave., dir. Div. Operations.

O., Dayton—AIRPORT RUNWAYS—Concrete runways, approaches to proposed airport administration bldg., Municipal Airport, Troy Pike. **WPA. $380,000.**

Okla., Norman—AIRPORT—University of Oklahoma, Norman, imprv. Westheimer Airport. **WPA. $232,565.** W. Kraft, Norman, engr. CD 11/26—ENR 12/5.

Ore., North Bend—AIRPORT—Airport completion. **WPA. $87,361.**

★**Ore., Portland**—SHIPWAYS, etc.—Commercial Iron Wks., W. Carey, mgr., foot of S.W. Grover St., 2 shipways, 2 story, 60x80 ft. frame office bldg., other bldgs., for shipyard expansion, day labor. **$500,000.** S. B. Hayslip, Postal Bldg., archt. CD 10/16—ENR 10/23, under Industrial Bldgs.

†Tenn., Camp Forest—GASOLINE SYSTEM —U. S. Eng., U. S. Custom House, Nashville, A.C. gasoline fueling sys., Observation Squadron Airfield, to Aqua System, Inc., 385 Gerard Ave., New York, N. Y. **$42,050.** CD 9/16—ENR 9/18.

Tex., Alice—LIVESTOCK—Livestock Comn., San Diego, 1 story, 300x300 ft., concrete, frame, corrugated iron livestock commission and storage bldg., to J. R. Guedea, Alice. **$42,000.**

★**Tex., Gilmer**—NATURAL GAS GENERATING UNITS—Farmers Electric Generating Co-operative, c/o H. P. McGaughy, pres., Gilmer, natural gas generating units, furnishing, del., installing 3 natural gas-engine drive direct-connected generators, cooling pumps, etc., to Nordberg Mfg. Co., 3073 S. Chase Ave., Milwaukee, Wis. Est. **$550,000.**

Tex., Pasadena—FERRY LANDING, etc.—Harris Co., c/o Purch Agt., Houston, ferry landing, facilities, to H. E. Cagle, 2410 M Duffie St., Houston. **$32,298.** Est. $40,000.

†C. Z., Howard Field—GAS STORAGE TANK FOUNDATION—Con. Q.M., fdn. for war reserve gas storage tanks, to N. Severin Co., 222 W Adams St., Chicago, Ill. **$88,700.** Bids 10/1, awarded 10/11.

Que., St. Hubert—AERODROME—Dpt. Transport, Ottawa, Ont., grading, hard-surface taxi strip, etc., aerodrome, to Raymond McDonell & Co., Ltd., 2020 Union St., Montreal. **$25,000.**

PUBLIC BUILDINGS

PROPOSED WORK

†Ala., Childersburg—Bd. Educ., Talladega Co., school, Docket Ala. 1-150. $50,000. **DPW.**

†Ala., Birmingham—City Bd. Educ., school addn., Docket Ala. 1-112, $77,419; negro school addn., Docket Ala. 1-116, $37,500. **DPW.**

†Ala., Jacksonville—City, recreational facilities, Docket Ala. 1-134. $75,000. **DPW.**

†Ala., Muscle Shoals—Tennessee Valley Auth., Knoxville, Tenn., 440 defense homes.

†Ala., Phenix City—Con. Q.M., 494 Spring St. N.W., Atlanta, Ga., recreation center, Docket Ala. 1-177. $75,000. **DPW.**

†Ala., Sylacauga—Bd. Educ., Junior High School addn., Docket Ala. 1-144. $85,500. **DPW.**

†Ala., Talladega—Talladega Co. Bd. Educ., 1 story school and school addn. Docket Ala. 1-126. $135,000; 2 story school addn. Docket Ala. 1-128, $95,000. **DPW.**

†Ark., Little Rock—Pulaski Co. Special School Dist. school alterations addns., etc., Docket Ark. 3-107, $96,000. **DPW.**

★**†Ark., Pine Bluff**—War Dpt., 20 St. and Constitution Ave., N.W., Wash., D. C., magnesium and thermite incendiary bomb manufacturing plant, incl. mfg. and assembly plant, chemical warfare and storage depots, laboratories, shops, offices, hospital, fire and police stations, communication facilities and utilities, for Chemical Warfare Service, near here.

†Ariz., Fort Huachuca—Cochise Co., Bisbee, plans by Lescher & Mahoney, Title & Trust Bldg., Phoenix, school, Docket Ariz. 2-102, $102,800. **DPW.** CD 9/22—ENR 9/25.

†Ariz., Tucson—City, health center and welfare activities, Docket Ariz. 2-107. $36,500. **DPW.**

†Calif., Bakersfield—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-299. $3,600. **DPW.**

†Calif., Chula Vista—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-302. $45,000. **DPW.**

★**Calif., Monterey**—Monterey Co., plans by R. Stanton, Del Monte Hotel, Del Monte, combined heating plant and laundry bldg., for hospital. $160,000. Ultimate expenditure $600,000 which will comprise 6 other units.

†Calif., Riverside—Con. Q.M., 74 New Montgomery St., San Francisco, recreation center, Docket Calif. 4-269. $16,000. **DPW.**

†Calif., National City—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-290. **DPW.**

†Calif., North Sacramento—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-300. $10,000. **DPW.**

†Calif., Richmond—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-254. $35,000. **DPW.**

†Calif., San Diego—City, recreation facilities, Docket Calif. 4-279. $114,500. **DPW.**

†Calif., San Luis Obispo—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-267. $68,000. **DPW.**

PUBLIC BLDGS. (Proposed Work, Cont'd.)

†Calif., **Santa Monica** — Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Calif. 4-298. $20,000. **DPW.**

†Calif., **Stockton**—City, recreational facilities, Docket Calif. 4-252. $20,000. **DPW.**

★†Calif., **Stockton**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., specialist mechanic school, 3 motor repair shops with classrooms, motor repair shop, 22 barracks, 3 mess halls, 3 recreation bldgs., 3 administration bldgs. and storehouses, school administration bldg., officers' quarters, hospital ward and post exchange.

†Colo., **Littleton**—School Dist. 16, Arapahoe Co., College View School, addns., alterations, imprvs., Docket Colo. 5-106. $17,500. **DPW.**

†Conn., **Bridgeport**—Bd. Educ., plans by H. G. Lindsay, 211 State St., 10 room brck. steel school, Beardsley Park Sect., Docket Conn. 6-109. $100,000. **DPW.** CD 10/8—ENR 10/16.

†Conn., **Bridgeport**—City, Bd. Educ., brick, steel Edson School addn. $100,000. **DPW.** CD 10/22.

†Conn., **Groton**—Town plans by E. L. Schol-field, Mercer Bldg., New London, high school addn., Docket Conn. 6-111. $116,000. **DPW.** CD 10/9—ENR 10/16.

★†Conn., **Hartford**—City, 3 story stone wing addn. to isolation hospital, Holcomb St., Docket Conn. 6-104, $513,313. **DPW.** Architectural Bureau, 550 Main St., engrs. CD 10/24.

†Conn., **Stratford**—Town, school addn., Docket Conn. 6-135, $55,437; Lordship School addn., Docket Conn. 6-145, $70,479; Stonybrook School addn., Docket Conn. 6-128, $135,000. **DPW.** CD 7/16—ENR 7/24.

†Conn., **New London**—Con. Q.M., Army Base, Boston, Mass., recreation center, Docket Conn. 6-169. $70,000. **DPW.**

†Conn., **Stratford**—Town, W. H. Shea, mgr., sketches by Charles Wellington Walker, 1115 Main St., Bridgeport, 1 story, brick, steel high school addn., Docket Conn. 6-136. $39,-611. **DPW.** CD 10/9—ENR 10/16.

†D. C., **Wash.**—Con. Q.M., Standard Oil Bldg., Baltimore, Md., recreation center. Docket D. C. 49-118. $16,200. **DPW.**

†Fla., **De Soto City**—Town, recreational facilities, Docket Fla. 8-173. $5,000. **DPW.**

†Fla., **Jacksonville**—Con. Q.M., 494 Spring St. N.W., Atlanta, Ga., recreation center, Docket Fla. 8-213. $45,000. **DPW.**

†Fla., **Jacksonville Beach**—Con. Q.M., 494 Spring St. N.W., Atlanta, Ga., recreation center, Docket Fla. 8-214. $5,000. **DPW.**

†Fla., **Orlando**—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Fla. 8-176. $11,000. **DPW.**

†Fla., **Panama City**—City, recreational facilities, Docket Fla. 8-162. $50,000. **DPW.**

†Fla., **Tampa**—City, recreational facilities, Docket Fla. 8-109. $43,000. **DPW.**

†Fla., **West Palm Beach**—Bd. Pub. Instruction Palm Beach Co., school, Docket Fla. 8-102. $63,988. **DPW.**

†Ga., **Atlanta**—City, recreational facilities, Docket Ga. 9-151. $137,920. **DPW.**

†Ga., **Albany**—Con. Q.M., 494 Spring St. N.W., Atlanta, recreation center, Docket Ga. 9-175. $20,000. **DPW.**

★†Ga., **Columbus**—Muscogee County Bd. Educ., plans by Associated Architects of Columbus, 11 W. 12 St., elementary and high school Newton D. Baker Village, Ga. 9-113. $540,000. **DPW.**

†Ga., **Fort Screven**—Con. Q.M., 494 Spring St. N.W., Atlanta, motor repair bldg., gas tank.

†Ga., **Moultrie**—City, recreational facilities, Docket Ga. 9-139. $30,430. **DPW.**

†Ga., **Savannah Beach, Tybee Island**—Con. Q.M., 494 Spring St. N.W., Atlanta, recreation center, Docket Ga. 9-120. $4,614. **DPW.**

†Ga., **Savannah**—Bd. Pub. Educ. of City of Savannah and Chatham Co., 2 story school, Docket Ga. 9-115. $171,000. **DPW.**

†Ga., **Valdosta**—City, recreational facilities, Docket Ga. 9-182. $40,000. **DPW.**

†Ill., **Bathalto**—Community Consolidated School Dist. 152, Madison Co., school addn., remodeling, Docket Ill. 11-131. $53,000. **DPW.**

†Ill., **East Alton**—School Dist. 101, Madison Co., Blair Elementary School addn., Docket Ill. 11-132. $75,014. **DPW.**

†Ill., **Milan**—School Directorz Dist. 52, Rock Island Co., school addn., alterations, Docket Ill. 11-135. $34,000. **DPW.**

†Ill., **Milan**—School Directors Dist. 61, Rock Island Co., rural school addn., etc., Docket Ill. 11-142. $18,959. **DPW.**

†Ill., **Moline**—School Dist. 49, Rock Island Co., school alterations, addn., near here, Docket Ill. 11-153. $18,600. **DPW.**

†Ill., **Rock Island**—Bd. Educ. Rock Island School Dist., Grant School addn., Docket Ill. 11-108. $60,500. **DPW.**

†Ill., **Rock Island**—School Directors, Dist. 46, Rock Island Co., school addn., Docket Ill. 11-150. $11,900. **DPW.**

†Ill., **Rock Island**—School Directors, Dist. 49, Rock Island Co., school addn., Docket Ill. 11-152. $6,160. **DPW.**

†Ill., **Rock Island**—School Directors, Dist. 67, Rock Island Co., school imprvs., Docket Ill. 11-160. $2,700. **DPW.**

†Ill., **Savanna**—City, hospital, Docket Ill. 11-167. $163,000. **DPW.**

†Ill., **Scott Field**—U. S. Eng., 816 U. S. Court House and Custom House, St. Louis, Mo., bids soon, ice storage bldg., motor repair shop, officers mess, oil house.

Ind., Evansville—Electric light plant addn. $125,000 or more with equip.

†Ind., **Charlestown** — Bd. City Trustees, recreational facilities, Docket Ind. 12-144. $66,140. **DPW.**

†Ind., **La Porte**—Center School Twp. La Porte Co., school, Docket Ind. 12-121. $196,000. **DPW.**

Ia., Bettendorf—$115,000 bond election Nov. 18, school, for Bd. Educ. $230,000. CD 9/24—ENR 10/2.

†Ia., **Middletown**—Independent School Dist., school addn., Docket Iowa 13-103. $24,600. **DPW.**

†Kan., **Junction City** — Bd. Educ., school addn., Docket Kan. 14-141. $21,000. **DPW.**

†Kan., **Wichita**—School Dist. 37, Sedgwick Co., temporary school, Docket Kan. 14-115. $14,205. **DPW.**

†Kan., **Wichita**—Eureka School Dist. 124, Sedgwick Co., school addn., Docket Kan. 14-138. $14,500. **DPW.**

★†Ky., **Ashland** — American Rolling Mill Co., Middletown, O., plant for manufacture synthetic scrap, annual capacity 600,000 tons. $842,000. Defense Plant Corp. will finance. CD 2/25—ENR 2/27, under Industrial Bldgs.

Ky., Louisville—Health Center bldg. adjacent to city hall. $167,000. Applied for federal allot.

★†Ky., **Louisville**—Hycar Chemical Co., c/o The B. F. Goodrich Rubber Co., 100 W. Bway., and Phillips Petroleum Co., Preston and Barnett Sts., bids soon, additional rubber factory, for War Dpt. $2,750,000. Defense Plant Corp. will finance.

†La., **Alexandria**—Federal Security Admin., San Antonio, Tex., plans by M. Heinberg, Alexandria, recreation bldg., Docket La. 16-123. $122,967. **DPW.** CD 10/9—ENR 10/16.

★†La., **Alexandria**—Executive Bd. Louisiana Baptist Convention and Baptist Hospital, c/o J. L. Pitts, Box 1546, plans by Neild, Somdal & Neild, City Bank Bldg., Shreveport, Baptist Hospital addn., Docket La. 16-120. $640,653. CD 10/22.

†La., **Alexandria-Pineville** — State Bd. Health, Baton Rouge, health center, Docket La. 16-167. $116,000. **DPW.**

†La., **Baton Rouge** — State Bd. Health, health center, Docket La. 16-112. $348,000. **DPW.**

†La., **Benton** — State Bd. Health, Baton Rouge, health center, Bossier Parish, Docket La. 16-183. $6,960. **DPW.**

†La., **Bunkie** — State Bd. Health, Baton Rouge, health center, Docket La. 16-180. $5,800. **DPW.**

†La., **Colfax** — State Bd. Health, Baton Rouge, health center, Docket La. 16-179. $5,800. **DPW.**

†La., **Crowley** — State Bd. Health, Baton Rouge, health center, Docket La. 16-172. $17,400. **DPW.**

†La., **De Ridder**—State Bd. Health, Baton Rouge, health center, Docket La. 16-169. $34,800. **DPW.**

La., De Ridder—K. R. Hanchey, pres. School Bd., De Ridder, plans by M. J. Heinberg, Alexandria, school. $257,069. Applied for DPW funds.

†La., **Glenmora**—State Bd. Health, Baton Rouge, health center, Docket La. 16-177. $5,800. **DPW.**

†La., **Jena** — State Bd. Health, Baton Rouge, health center, Docket La. 16-182. $5,800. **DPW.**

†La., **Lafayette** — State Bd. Health, Baton Rouge, health center, Docket La. 16-171. $34,800. **DPW.**

†La., **Lake Charles** — State Bd. Health, Baton Rouge, health center, Docket La. 16-170. $34,800. **DPW.**

La., Le Compte—State Bd. Health, Baton Rouge, health center, Docket La. 16-178. $5,800. **DPW.**

†La., **Leesville** — State Bd. Health, Baton Rouge, health center, Docket La. 16-168. $34,800. **DPW.**

†La., **Marksville**—State Bd. Health, Baton Rouge, health center, Docket La. 16-175. $8,700. **DPW.**

†La., **Natchitoches**—State Bd. Health, Baton Rouge, health center, Docket La. 16-173. $17,400. **DPW.**

†La., **Oakdale** — State Bd. Health, Baton Rouge, health center, Docket La. 16-181. $5,800. **DPW.**

†La., **Pickering**—Vernon Parish School Bd., school, Docket La. 16-141. $40,000. **DPW.**

†La., **Ville Platte**—State Bd. Health, Baton Rouge, health center, Docket La. 16-176. $8,700. **DPW.**

†La., **Winnfield**—State Bd. Health, Baton Rouge, health center, Docket La. 16-174. $8,700. **DPW.**

†Me., **Bath**—City, plans by A. J. Harriman, 88 Shepley St., Auburn, bids soon, school, Center St. and Dike Rd., Docket Me. 17-101F. $161,000. **DPW.**

†Mass., **Mashpee**—Con. Q.M., Army Base, Boston, recreation center, Docket Mass. 19-142. $45,000. **DPW.**

†Mass., **Shirley** — Con. Q.M., Army Base, Boston, recreation bldg. $30,000.

†Mass., **South Weymouth**—Weymouth Hospital plans by J. Williams Beal Sons, 185 Devonshire St., Boston, hospital addns., alterations, Docket Mass. 19-109. $150,000. **DPW.** CD 10/8—ENR 10/16.

†Mass., **Weymouth**—Weymouth Hospital, 864 Main St., plans by J. William Beal Sons, 185 Devonshire St., Boston, brick, steel hospital addn., Docket Mass. 19-109, **DPW.**

†Mich., **Garden City**—School Dist., school, Docket Mich. 20-139. $42,160. **DPW.**

†Mich., **Muskegon**—Hackley Hospital, hospital, hospital addn., Docket Mich. 20-115. $381,000. **DPW.**

†Mich., **Warren Twp**—School Dist. 2, Warren Twp., Macomb Co., plans by Frederick D. Madison, Inc., 219 Wash. Sq. Bldg., Royal Oak, school, Docket Mich. 20-123. $63,400. **DPW.** CD 9/22—ENR 9/25.

★†Minn., **Crosby**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., magnesium concentrating plant. $5,000,000.

Mo., Ferguson (St. Louis P. O.)—School Dist., W. P. Knowlton, pres. Bd. Educ., 200 Church Rd., plans by Wm. B. Ittner, Inc., 408 Bd. Educ. Bldg., 911 Locust St., St. Louis, Junior High School addn., school, and high school addn. $211,100. Applied for DPW gr.

Mo., Gardenville (St. Louis P. O.)—Bayless Consolidated School Dist. of St. Louis Co., c/o H. Goss, pres. Bd. Educ., 4530 Weber Rd., St. Louis County, plans by M. Boulicault, 1401 Ambassador Bldg., St. Louis. $272,148. Applied for DPW gr.

†Mo., **Jefferson Barracks (St. Louis P. O.)**—U. S. Eng., 816 U. S. Court House and Custom House, St. Louis, bids soon, trade test bldg.

†Mo., **Kansas City**—Con. Q.M., 14 and Farnham Sts., Omaha, Neb., recreation bldg.

†Mo., **St. Louis**—Con. Q.M., 14 and Farnham Sts., Omaha, Neb., recreation bldg.

†Mo., **Waynesville**—State Bd. Health, Jefferson City, plans by John Schaper, Jefferson City, health center, Docket Mo. 23-121. $26,250. **DPW.** CD 9/30—ENR 10/2.

Nev., Ely — White Pine Co., c/o County Clerk, Ely, central heating plant for county bldgs. $60,000. Applied for DPW loan.

†Nev., **Hawthorne**—Bd. Trustees Hawthorne School Dist. 7, Hawthorne School addn., Docket Nev. 26-102. $17,180. **DPW.**

N. J., Clifton—Bd. Educ., City Hall, plans by H. A. Kelly & Assoc., Hunt Bldg., Hanover St., Trenton, high school addn. for vocational school, Piaget Ave. $425,000. Applied for DPW funds.

★**N. J., East Paterson**—Bd. Educ., Town Hall, plans by A. E. Dore, 332 River St., Hackensack, Gilbert Ave. School alterations, addns., to convert same into Junior and Senior High School. $618,000.

N. J., Long Branch—Housing Auth., City Hall, bids soon 12 two story, bsmnt., brick, stone apartment bldgs., Liberty St. $414,000. H. I. Braun, 138 Garfield Court, archt. E. D. Powers, 20 Branford Pl., Newark, engr. CD 6/16—ENR 6/26.

N. Y., Binghamton—Bd. Educ., 98 Oak St., plans by Conrad & Cummings, 99 Collier St., Calvin Coolidge School. $400,000.

†N. Y., **Greenport**—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket N. Y. 30-154. $6,000. **DPW.**

N. Y., Massena—Hospital. Over $150,000.

†N. Y., **Youngstown**—Con. Q.M., 120 Wall St., New York, recreation center, Docket 30-161. $6,912. **DPW.**

N. C., Charlotte—State Textile Institute plans by Breeze & Rivers, Shelby, training school. $200,000.

†N. C., **Fayetteville** — Cumberland Co. Bd. Educ., plans by W. H. Dietrich, Raleigh, school, Docket N. C. 31-107, $103,000; school, Docket N. C. 3-124, $24,700, FWA. CD 9/8—ENR 9/11.

N. C., Statesville—Iredell Co. Bd. Educ., S. H. Houston, chn., Troutmans, bond election Nov. 25, new school bldgs. $270,000. J. C. Fowler, Statesville, chn. Bd. Iredell Co. Comrs.

PUBLIC BLDGS. (Proposed Work, Cont'd.)

†**N. C., Wilmington**—Bd. Managers James Walker Memorial Hospital, hospital and nurses home, Docket N. C. 31-127 and N. C. 31-901. Total est. $499,300. **DPW.** CD 9/18—ENR 9/25.

†**N. C., Wilmington**—City, hospital addn., Docket N. C. 31-132. $163,200. **DPW.**

★†**N. C., Wilmington**—New Hanover Co. Bd. Educ., 3 new schools, 6 school addns., Docket 31-113. $868,023. **DPW.** CD 9/18—ENR 9/25.

†**Okla., Lawton**—Con. Q.M., Fort Sam Houston, Tex., recreation center, Docket Okla., 34-132. $128,000. **DPW.**

†**Okla., Lawton**—Bd. Educ., Douglas School addn., Docket Okla. 34-114. $11,000. **DPW.**

Okla., Oklahoma City—Bd. Educ., plans by Winkler & Reid, Okla. Savings & Loan Bldg., manual training school, 3 and Walnut Sts. $250,000. Applied for DPW allot.

★**O., Akron**—Akron City Hospital, G. Benner, pres., 529 E. Market St., plans by Good & Wagner, Central Tower Bldg., Cleveland, 6 story, 50x150 ft. brick, concrete hospital addn. $732,000.

O., Lancaster—2 story, brick, steel hospital addn. $185,000. C. G. Axline, Lancaster, hospital bldg. comr.

★†**O., Middletown**—American Rolling Mill Co., Middletown, O., 3-furnace electric steel plant. $554,000. Defense Plant Corp. will finance.

O., Warren—Howland Twp. Rural School Dist., A. C. Griffing, clk., $150,000 bond election Nov. 4, school addn.

†**Ore., Astoria**—Con. Q.M., Fort Stevens, recreation center. $110,000. CD 10/9—ENR 10/16.

Ore., Oregon City—Clackamas Co. Housing Auth. plans by R. L. Morin, Pub. Serv. Bldg., Portland, and bids soon, 100 unit housing. $300,000.

†**Ore., Stanfield**—School Dist. 61, Umatilla Co., school addns., Docket Ore. 35-127. $19,090. **DPW.**

†**Pa., Aliquippa** — Beaver County Housing Auth., R. Bennett, chn., Court House, Beaver, revised plans by A. Martsolf, G. E. Trent & H. Bradley, 9 St., Monaca, 50 defense housing units, Project 36058X, for USHA. Bids 10/10 rejected. E. S. Tower, 213 Investment Bldg., Pittsburgh, engr. M. Baker, Jr., Rochester, site engr. CD 10/15—ENR 10/23, under LB.

†**Pa., Coatesville**—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., 400 defense homes.

★†**Pa., Clairton**—Div. Defense Housing, FWA, 18 and F Sts., N.W., Wash., D. C., revised plans by C. M. and E. Stotz, Jr., 701 Bessemer Bldg., Pittsburgh, 138 defense housing units, Project 36152X. $1,260,000. Bids 10/3 rejected. CD 10/20—ENR 10/23 under CA.

†**Pa., Midland** — Beaver County Housing Auth., R. Bennett, chn., 119 9 St., Monaca, rejected bids Oct. 3, 30 defense housing units, Project 36060X, for USHA. Martsolf, Trent & Bradley, 9 St., Monaca, archts. E. S. Tower, Investment Bldg., Pittsburgh, engr. CD 9/26.

★**Pa., Phila.**—Administration building. $2,000,000.

Pa., Tarentum—Boro, H. H. Girt, secy., 304 Lock St., light and power plant addn., alteration. $90,000. Morris Knowles, Inc., 1312 Park Bldg., Pittsburgh, engr.

†**R. I., Newport**—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket R. I. 37-134. $45,000. **DPW.**

†**R. I., Newport**—Federal Security Agency, 25 & E Sts. N.W., Wash., D. C., recreational facilities, Docket R. I. 37-135. $120,000. **DPW.**

†**R. I., North Kingston**—Town, plans by E. O. Ekman, 72 Weybosset St., Providence, school alterations, addns. Docket R. I. 37-129. $48,700. **DPW.** CD 10/7—ENR 10/9.

R. I., Warwick—Mayor's Office, City Hall, plans by S. W. MacConnell, 212 Washington St., Lakewood, for Buttonwoods School addn. $35,000. Filed DPW application.

R. I., Warwick—Mayor's Office, City Hall, sketches by E. O. Ekman, 72 Weybosset St., Providence, brick, steel fire station, fire alarm sys. $230,000. Applied for federal gr.

†**Tenn., Humboldt**—City, Junior High School, Docket Tenn. 40-118, $59,750. **DPW.**

†**Tenn., Jackson, Milan, Humboldt** — Div. Defense Housing, 811 Vermont Ave. N.W., Wash., D. C., 200 demountable defense homes.

†**Tenn., Milan**—Mayor and Bd. Aldermen, school, Docket Tenn. 40-110. $72,000. **DPW.** CD 6/25—ENR 7/3.

†**Tenn., Milan**—Mayor and Bd. Aldermen, negro elementary and high school addn., Docket Tenn. 40-116, $13,143; Milan High School addn., alterations, Docket Tenn. 40-120, $26,200. **DPW.**

†**Tenn., Nashville**—Con. Q.M., 494 Spring St. N.W., Atlanta, Ga., recreation bldg.

†**Tenn., Tullahoma**—Mayor and Bd. Aldermen, school, Docket Tenn. 40-139. $65,400. **DPW.**

†**Tenn., Tullahoma**—Mayor and Bd. Aldermen, high school addn., Docket Tenn. 40-150, $21,800. **DPW.**

†**Tex., Abilene**—Federal Security Agency, 25 and E Sts. N.W., Wash., D. C., recreational facilities, Docket Tex. 41-298. $35,000. **DPW.**

Tex., Henrietta—Midway School Dist. 1, Henrietta, 1½ story, 130x332 ft. school. $150,000. Applied for WPA funds. Voelcker & Dixon, 913½ Indiana Ave., Wichita Falls, archts. CD 9/18—ENR 9/25.

†**Tex., Marfa**—City, recreational facilities, Docket Tex. 41-188, $45,000. **DPW.**

†**Tex., Mineral Wells**—Con. Q.M., Fort Sam Houston, recreation center, Docket Tex. 41-166. $77,000. **DPW.**

†**Tex., Orange**—Mutual Ownership Defense Housing Div., FWA, 18 and F Sts. N.W., Wash., D. C., 900 defense homes.

Tex., Quitman—Surveys electric light plant and distr. sys. Over $40,000. Albert C. Moore & Co., 2404 Smith-Young Tower, San Antonio, engrs.

Tex., San Antonio—$490,000 bond election Nov. 15, Junior College Bldg., for Junior College Organizing Com., 419 S. Alamo St., O. P. Schnabel, chn.

†**Tex., Wichita Falls** — Federal Security Agency, 25 and E Sts. N.W., Wash., D.C., recreational facilities, Docket Tex. 41-224. $45,000. **DPW.**

†**Tex., Ysleta**—Independent School Dist., Escarate School addn. Docket Tex. 41-149. $79,000. **DPW.**

†**Utah, Ogden**—Bd. Educ., Central Junior High School addns., alterations, imprvs., Docket Utah 42-103. $173,000. **DPW.**

★†**Utah, Provo**—Columbia Steel Co., C. T. Keigley, genl. supt., Provo, enlarging plant for increased production pig iron and coke. $35,000,000. Defense Plant Corp. will finance.

†**Va., Alexandria**—School Bd., temporary school at Chinquapin Village, addns. to Mt. Vernon, Maury and George Mason and Parker-Gray Schools, Docket Va. 44-1138. $139,000.

†**Va., Hampton**—County School Bd., Elizabeth City County plans by Williams, Coile & Pepino, Newport News, school, Docket Va. 44-133. $325,000. **DPW.** CD 9/16—ENR 9/18.

†**Va., Radford**—Radford Community Hospital, Inc., hospital and nurses home, Docket Va. 44-185. $260,000. **DPW.**

Wash., Forks — Clallam County Housing Auth., Port Angeles, plans by G. W. Stoddard, Orpheum Bldg., Seattle, 100 housing units. $300,000. $125,000 USHA allot. for first 40 units. CD 9/25—ENR 10/2.

Wash., Port Orchard—School Bd., plans by G. W. Stoddard, Orpheum Bldg., Seattle, bids soon 1 story, part bsmnt., 205x368 ft., rein.-con. school. $200,000.

★†**Wash., Seattle**—Pacific Car & Fdry. Co., 220 W. Hudson St., plant addn. for manufacturing castings. $700,000. Defense Plant Corp. will finance.

Wash., Seattle—Highline School Dist., Sunnydale, high school addn., near here. $400,000. Seeking federal and state funds.

†**W. Va., Morgantown**—City, recreational facilities, Docket W. Va. 46-121. $28,000. **DPW.**

★†**Wis., Beloit** — FACTORY — Fairbanks, Morse & Co., Beloit, 460 x 660 ft., brick, steel, concrete factory for Navy Dpt. $5,500,000.

Wis., Port Washington—W. Darby, city engr., 6035 W. National Ave., West Allis, making study, 200 homes housing.

★†**Wis., West Allis** — Allis-Chalmers Mfg. Co., 1120 S. 70 St., Milwaukee, plant for manufacture superchargers, at or near here, for War Dpt. $9,066,964. Defense Plant Corp. will finance. CD 7/8—ENR 7/10, under Industrial Bldgs.

†**Alaska, Anchorage**—City, health center, Docket Alaska 50-117. $35,000. **DPW.**

†**Alaska, McKinley Park**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., recreation bldg.

†**Puerto Rico, Toro Negro, Arecibo**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., recreation bldg.

†**T. H., Waimanalo, Oahu**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., recreation bldg.

★†**Virgin Islands, Charlotte Amalie, St. Thomas**—Virgin Islands Co., diesel electric generating plant, necessary transmission lines and distr. sys., incl. street lightling, to serve community, and provide electric standby service for Navy Base. $500,000.

★**N. B., Moncton**—Dominion Govt., Ottawa, Ont., Composite home base, 100 frame bldgs., concrete fdns., for R.A.F. and R.C.A.F. $600,000. Works & Building Branch, R.C.A.F., Jackson, Ottawa, Ont., archts.

N. S., Amherst—Wartime Housing Ltd., 55 York St., Toronto, Ont., bids soon 50 prefabricated houses and 1 staff house. $155,000.

Ont., Ottawa—Secy. Dpt. P. Wks., Ottawa, bids soon temporary office, Sussex St. $400,000. C. D. Sutherland, c/o owner, archt.

BIDS ASKED

Bids Asked Nove[illegible] 3

★†**N. J., Dover**—Pub. Bldg[illegible] Admin., 7 and D Sts. S.W., Wash., D. C., [illegible] defense hous[illegible] ing units, S. Salem St., [illegible] 25191 [illegible] $1,050,000. L. A. Simon, 7 [illegible] D Sts. S.W., Wash., D. C., archt. CD 9/[illegible]

Bids Asked Novem[illegible] 5

†**Md., Cheltenham**—Yards [illegible] Docks, Navy Dpt., 18 St. and Constitution A[illegible] N.W., Wash., D.C., remodeling barracks, [illegible]en. receiving bldg., enlarging sewage disp[illegible] plant, connections to sewers, Naval Ra[illegible] Station.

★†**Tex., Corpus Christi**—R. [illegible] Fisher, supt. Corpus Christi Independent School Dist. (1st unit), school building program. Tex. 41-144. $1,305,660. **DPW.** [illegible]rock, Roberts & Anderson, Jones Bldg., archts. CD 9/15—ENR 9/18.

Bids Asked November 7

Fla., Daytona Beach—Daytona Beach Housing Auth., 66 unit housing Project Fla. (7-2). CD 7/24—ENR 7/3.

†**N. J., Fort Dix**—Pub. Bldgs. Admin., 7 and D Sts., Wash., D. C., management and maintenance bldg, also maintenance garage for defense housing; adv. ENR 10/30.

†**R. I., Newport**—Pub. Wks. Officer, Naval Training Station, 2 story, 58x122 ft. brick, steel recreational amphi-theatre, with 30x82 ft. well, service connections, etc., Naval Training Station, Spec. 10677. CD 10/21—ENR 10/23.

Bids Asked November 10

†**Tex., San Antonio**—U. S. Eng., Federal Bldg., Galveston, photographic laboratory, Kelly Field.

Bids Asked November 12

†**N. H., Portsmouth**—Pub. Wks. Officer, Navy Yard, brick carbide storage bldg., Navy Yard, Spec. 10680.

Bids Asked November 14

†**N. J., Dover**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., fifteen 1 and 2 story masonry bldgs., coal storage facilities, covering for ether and alcohol tanks, utilities, etc., Picatinny Arsenal.

Neb., Lincoln—Bd. Regents, University of Nebraska, home economics bldg. $150,000. Meginnis & Schaumberg, Federal Securities Bldg., archts. CD 7/16—ENR 7/24.

N. Y., Brooklyn—Dpt. P. Wks., Municipal Bldg., New York, altering nurse's home, Sect. 2, Kings County Hospital, New York Ave. and Winthrop St.

†**Pa., Phila.**—Con. Q.M., 20 and Johnston Sts., 4 story optical shop, Frankford Arsenal, adv. ENR 10/30.

†**Pa., Phila.**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., superstructure for Service Bldg. No. 625, Pier D and exten. Bldg. 607, Pier D, Navy Yard No. 10614.

Bids Asked November 15

★**Ky., Owensboro**—Owensboro Housing Comn. c/o B. A. Robertson, chn., general contract 124 unit, white tenant, housing, $481,000, and 50 unit negro tenant housing, $216,000. H. Meriwether, 234 E. Short St., Lexington, archt. CD 7/24—ENR 7/31.

†**Md., Annapolis** — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., 1 story exten., and altering 1 story garage, U. S. Naval Academy.

★†**N. H., Laconia**—Scott & Williams, Inc., 266 Union St., brick, steel factory for manufacture aircraft equip., for War Dept. $809,331. Defense Plant Corp. will finance. E. Beyster, General Motors Bldg., Detroit, Mich., engr. CD 10/14—ENR 10/16.

†**N. H., Portsmouth**—Con. Q.M., Army Base, Boston, Mass., 1 story USO recreation bldg. $55,000. M. E. Witmer, Hillside Dr., archt.

★†**Pa., Williamsport**—Aviation Mfg. Corp. (Lycoming Div.), Williamsport, 1 story, 380x425 ft., steel, cement or cinder block plant for manufacture airplane engines for War Dpt. $957,249 for land and buildings, $2,757,028 for machinery and equip. Defense Plant Corp. will finance.

Bids Asked After December 6

★†**Tex., Bastrop**—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., cantonment type camp, utilities, ground development, etc. $22,500,000. Freese & Nichols, Capps Bldg., Fort Worth, engrs. and archts. CD 7/31—ENR 8/7.

†**Wash., Inchelium**—Office Indian Affairs, Dpt. Interior, 19 and C Sts. N.W., Wash., D. C., grade and high school, Colville Agency, near here. Extended date. CD 10/9.

LOW BIDDERS

★**Calif., Long Beach**—Div. Defense Housing, FWA, 1206 Santee St., Los Angeles, 600 defense housing units, Los Angeles Harbor area, Project 4102 X, from Zoss Constr. Co., 1037 Cole Ave., Los Angeles, approx. $1,500,000. CD 10/8—ENR 10/16.

★**Ill., Chicago**—Chicago Housing Auth., 208 S. LaSalle St., Oct. 15, 586 unit (55 bldgs.) Frances Cabrini Homes, Chicago Ave., Larrabee, Oak and Hudson Sts., from S. N. Nielsen Co., 3059 W. Augusta Blvd. $2,719,000. CD 10/14—ENR 9/4.

PUBLIC BLDGS. (Low Bidders, Cont'd)

†Ill., Rock Island—U. S. Eng., Arsenal, Rock Island, Oct. 15, garage and storage depot, Arsenal Island, from Coath & Goss, Inc., 228 N. La Salle St., Chicago. **$181,685.** CD 10/9.

†Md., Aberdeen Proving Ground—Con. Q.M., Oct. 9, furnishing, del. structural steel for new assembly shop, from Lehigh Structural Steel Co., foot of Allen St., Allentown, Pa., **$65,222.** CD 9/30—ENR 10/2 under Unclassified.

†N. H., Manchester—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., Oct. 17, 85 dwelling units, Weston Rd., Project 27021 X, from Hanna Bros., Inc., 415 Lexington Ave., New York, N. Y., **$380,847.** Est. $295,000. CD 10/15.

†N. J., East Paterson—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., Oct. 20, fifty 1 and 2 story frame defense homes, Project 28052 X, from E. M. Johnson, 706 Bergen Ave., Jersey City. **$365,700.**

★†O., Cleveland—National Advisory Com. for Aeronautics, E. R. Sharp, constr. administrator, Langley Field, Hampton, Va., fuel and lubricants bldg., Cleveland Airport, from James McHugh, 6449 S. Park St., Chicago, Ill., **$640,000.**

★Pa., Pennhurst (P. O. Spring City)—General State Auth., 2 and Locust Sts., Harrisburg, Oct. 24, general contract male and female ward bldgs., Pennhurst State School, from Henry E. Baton, Inc., 1713 Sansome St., Phila., **$621,600** *** heating, ventilating, from J. F. Moleski, Kulpmont, **$78,780*** ** plumbing, drainage, from W. M. Anderson Co., 600 Schuylkill St., Phila., **$51,987*** ** electrical work, from W. V. Pangborne & Co., Inc., 1927 Montgomery Ave., Phila., **$37,644** ***boiler, power house and engine generator set, power house, from Coxe Stoker Eng. Co., Hazleton, **$58,850** and **$35,880** respectively. CD 10/17—ENR 10/23.

★†Pa., Vanport — Beaver County Housing Auth., R. Bennett, chn., Court House, Beaver, revised bid 125 defense housing units for USHA, Project 36053X, from John W. Ryan Constr. Co., Inc., 369 Lexington Ave., New York, N. Y. **$527,000.** CD 10/9—ENR 10/16, under LB.

Wash., Bellingham—Western College of Educ. Oct. 20, boiler plant addn., from Roy T. Early Co., P.O. Box 1591, Tacoma. **$47,750.** CD 10/3—ENR 9/18.

CONTRACTS AWARDED

†Alabama—Con. Q.M., Anniston Ordnance Depot, USO recreation bldgs., at Talledega, Sylacauga Anniston and Childersburg, to A. J. Honeycutt, Inc., 2512 8th Court N., Birmingham, about **$240,000.** CD 10/22.

★†Calif., Mare Island—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N. W., Wash., D. C., ordnance machine shop, Mare Island Navy Yard, to Barrett & Hilp, 918 Harrison St., San Francisco, **$1,250,000,** cost plus fixed fee basis.

†Calif., Sacramento—U. S. Eng., Post Office Bldg., 4 warehouses, Sacramento Air Depot, to Moore & Roberts, 693 Mission St., San Francisco. **$120,183.** CD 8/12—ENR 8/14.

★†Calif., San Diego—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave., N. W., Wash, D. C., supplemental contract additional facilities, barracks, storehouses, schools, cold storage plant, power plant, small arms magazine, gas chamber, administration bldg., utilities, etc., naval training station, to Wm. Simpson Constr. Co., 1007 Architects Bldg., Los Angeles, **$3,291,820.** Additional to CD 10/11/40—ENR 10/17/40, under CA.

★†D. C., Wash.—Defense Homes Corp., 811 Vermont Ave. N.W., general contract, hotel, fronting Meridian Park, 15 and 16 Sts., to John W. Harris Associates, Inc., 30 Rockefeller Plaza, New York, N. Y., **$1,000,000.** Louis Justement, 1626 K St. N.W., Wash., D. C, archt. CD 9/10—ENR 9/18.

★†D. C., Wash.—Pub. Bldgs. Admin., 7 and D Sts. S.W., Wash., D. C., temporary Federal Office Bldg. R. to George A. Fuller Co., Munsey Bldg., **$712,000.** Awarded 10/18.

Georgia—Southwest Georgia Group Housing Auth., c/o E. C. Mann, exec .dir., Thomasville, 95 houses, Projects GA-13-1 to GA-19-1, Brooks, Lowndes, Colquitt, Mitchell, Decatur, Grady, Calhoun, Worth and Crisp Counties, to Knox Bros. Lumber Co., Thompson. **$176,700.** Bids 9/18. CD 9/15.

★†Ind., Connersville—Pub. Bldgs. Admin., 7 and D Sts. S. W., Wash., D. C. 300 defense housing units, to James I. Barnes Constr. Co., Logansport, **$1,123,400.** Bids 9/22 rejected. CD 9/30—ENR 10/2 under LB.

†Md., Cabin John—U.S.H.A., North Interior Bldg., Wash., D. C., 2 defense housing, Navy civilian workers, 100 dwellings in Cabin John and 20 homes, on Seven Locks Rd., about 1½ mi. from Cabin John, to C. B. Ross Co., Inc., 2 Lafayette St., New York, N. Y. **$458,286.** (Correction—contractors address.) CD 9/23—ENR 9/25 under CA.

†Mass., Boston — General Alloys Co., 405 1 St., South Boston, brick, steel plant for manufacture aircraft equip., for War Dpt., to D. F. Gallagher & Co., 162 Teneau St., Dorchester. Est. **$47,163** for land and buildings, **$44,000** machinery and equip. Defense Plant Corp. will finance. CD 17/17—ENR 10/23.

†Mich., Detroit—Holley Carburetor Co., 5930 Vancouver St., design and construction 2 story, 50x242 ft. brick, steel factory addn. for manufacturing munitions, plain fdn., for War Dpt., to Austin Co., 429 Curtis Bldg. Est. **$190,000.** Defense Plant Corp. will finance.

†Mich., Milan—Dpt. Justice, Constitution Ave. between 9 and 10 Sts. N.W., Wash., D. C., brick, steel, concrete industrial warehouse, to A. W. Kutsche Co., 816 Francis Palms Bldg., Detroit. Est. **$40,000.**

★†N. Y., Buffalo—Chevrolet Motor Div. General Motors Corp., 3044 W. Grand Blvd., Detroit, Mich., aircraft engine testing plant, River Rd., to Darin & Armstrong, Inc., 2041 Penobscot Bldg., Detroit, Mich. **$1,600,876.** Defense Plant Corp. will finance. CD 7/29—ENR 7/31, under Tonawanda.

★†N. Y., Massena—Aluminum Co. of America, Gulf Bldg., Pittsburgh, Pa., 66 buildings for blooming mill, own forces. Est. over **$15,000,000.** Defense Plant Corp. will finance. CD 10/20—ENR 10/23, under CA.

N. Y., New York—Dpt. Parks, Arsenal Bldg., Central Park, 64 St. and 5 Ave., altering public bath bldg., John Jay Park, **WPA. $342,731.** W. W. Johnstone, 70 Columbus Ave., dir. Div. Operations.

★†N. C., Jacksonville—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., 700 defense housing units, Marine Base, Project 31032X, to Goode Constr. Corp., Builders Bldg., Blythe Bros. Co., Inc., 424 S. Brevard St., and Harrison-Wright Co., 116 W. 3 St., all of Charlotte. Est. **$941,331.** CD 9/3—ENR 9/17.

★†O., Youngstown—Republic Steel Corp., Republic Bldg., Cleveland, foundation and substructure for 1,000 ton furnace, to Charles Shutrump & Sons Co., 101 W. Hylda St., over **$2,000,000.** Awarded 10/10. Defense Plant Corp. will finance. CD 10/10—ENR 10/16.

★†Okla., Choteau—War Dpt., 20 St. and Constitution Ave. N.W., Wash., D. C., awarded contract for engineering and architectural services, construction, acquisition and installing equip., option for training key personnel and operating Oklahoma Ordnance Works, to E. I. du Pont de Nemours & Co., Du Pont Bldg., Wilmington, Del. Construction to W. R. Grimshaw Co., Philtower Bldg., Tulsa. Est. **$37,000,000.** CD 9/18—ENR 9/25, under CA.

†Pa., Latrobe—Hunting, Davis & Dunnells, archts. and engrs., Century Bldg., Pittsburgh, brick, steel, rein.-con. plant for Stupakoff Ceramic & Mfg. Co., Latrobe, to Westmoreland Constr. Co., 622 W. Pittsburgh St., Greensburg, building **$105,000,** equip. **$110,-699.** Defense Plant Corp. will finance. Bids 10/21. CD 10/17.

★†S. C., Fort Jackson—Con. Q.M., miscellaneous bldgs., to J. A. Jones Constr. Co., 209 W. 4 St., Charlotte, N. C. **$537,282.**

★†Tex., Garland—Guiberson Diesel Engine Co., 1000 Forest St., Dallas, general contract plant for mfg. radial diesel air-cooled engines, for Army tanks for War Dpt., to National Concrete & Fireproof Co., Citizens Bldg., Cleveland, O., approx. **$762,500.** Total cost $2,311,096 incl. mchy. and equip. J. Gordon Turnbull Co., c/o owner, and Sverdrup & Parcel, Ry. Exchange Bldg., St. Louis, Mo., engrs. Defense Plant Corp. will finance. Awarded 10/25. CD 10/1—ENR 10/9.

†Va., Langley Field—U. S. Eng., Langley Field, fabrication and finishing shop for N.A.C.A., Langley Field, to Virginia Eng. Co., Melson Bldg., Newport News. **$191,600.**

★†Va., Norfolk—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N. W., Wash., D. C., 4 barracks, recreation hall, etc., Norfolk Navy Yard, to Allen J. Saville, Inc., Electric Bldg., Richmond, **$747,000.**

†Wash., Seattle—Seattle Housing Auth., Central Bldg., 700 unit defense housing, Gatewood Heights, Project 45053X, for U. S. H. A., to J. C. Boespflug, Securities Bldg., Seattle. **$2,535,000.** CD 10/14—ENR 10/16.

†Wis., Marinette—National Youth Assn., 1 story, 56x170 ft., brick, steel, concrete work shop. **NYA.** Hubert & Gjelsteen, 1065 Sheridan Rd., Menominee, Mich., archts.

†C. Z., Albrook and Howard Fields—Con. Q.M., school, to MacDonald Constr. Co. and G. L. Tarlton Contractor, Inc., Balboa, C. Z. **$476,813.** Bids 9/26, awarded 10/11. CD 9/15—ENR 9/18.

★Ont., Toronto—Toronto Shipbuilding Co., c/o Contractor, altering, constructing plant addn., for Dominion Govt., Ottawa, to Fraser-Brace Eng. Co. Ltd., 107 Craig St., W., Montreal, Que. About **$600,000.**

COMMERCIAL BUILDINGS

PROPOSED WORK

★Calif., Los Angeles—Ada Oil Corp., c/o H. E. Werner Studios, archts., 444 N. Camden Dr., Beverly Hills, restaurant, Wilshire Blvd. and Western Ave. $600,000.

Calif., North Hollywood — Calif. Homes Constr. Co., 405 S. Hill St., Los Angeles, plans by Paul Robinson Hunter, 1103 Architects Bldg., Los Angeles, 26x33 ft. and 36x36 ft. wood frame, stucco dwellings, Saticoy St., Tujunga and Fair Aves. Approx. $450,000.

Conn., Hartford—Mt. Sinai Hospital, 119 Capitol Ave., bids soon 4 story, bsmnt., 40x135 ft., brick, steel hospital addn. $250,000. Ebbets & Frid, 15 Lewis St., archts. CD 8/8—ENR 8/14.

Conn., Milford—Milford Hospital, Inc., Bridgeport Trpke, bids soon, 3 story, bsmnt., rein.-con. hospital addn. $150,000. R. H. S. Booth, Old Orchard Rd., North Haven, archt. Hubbard, Rickard & Blakeley, 275 Orange St., New Haven, engrs. CD 8/2—ENR 8/7 under BA.

Conn., New Britain—St. Francis of Assissi Parish., J. K. Brophy, pastor, sketches by J. J. McMahon, 187 Barker St., Hartford, 1 story, bsmnt., brick, stone church, Stanley St. and Kilborn Ave. $150,000.

Conn., West Hartford (br. Hartford)—St. Thomas the Apostle Parish, J. F. Callahan, pastor, 863 Farmington Ave., bids early in November, 1 story, bsmnt., brick, stone church superstructure, Farmington Ave. and Dover Rd. $150,000. J. J. McMahon, 187 Barker St., Hartford, archt. CD 10/17/40—ENR 10/24/40.

Ill., Rockford—YMCA, Rockford, I. D. Pennock, genl. secy., YMCA bldg. Over $200,000.

Ind., Indianapolis—J. C. Carr & Co., 40 or more homes, southeast Indianapolis. $200,-000 or more.

Ind., Indianapolis—R. S. Foster Co., 1700 Kentucky St., 50 or more houses, Irving Ridge addn., E. 10 St. and Shadeland Ave., northeast of city. $225,000.

Md., Baltimore—Maryland Dry Dock Co., Fairfield, soon lets contract 2 story, part bsmnt., 50x70 ft., brick veneer, steel office, with cafeteria and dispensary. J. E. Greiner Co., 1201 St. Paul St., engrs.

★N. J., Fair Lawn—Fair Lawn Knolls, 529 William St., Maywood, plans by P. H. Butler, 263 Elm Ave., Teaneck, one hundred 2 story, bsmnt., wood siding, brick veneer homes, E. Fairlawn Ave. $500,000.

★N. J., Westwood and Emerson—L. Bieler, c/o G. DeLaRec, 1 Westwood Ave., Westwood, two hundred 2 story, bsmnt., brick, frame homes, 4 Ave. $1,000,000.

★N. Y., Forest Hills—One Hundred and Thirteenth St. Corp., 29-28 41 Ave., Long Island City, plans by P. Birnbaum, 303 W. 42 St., New York, two 6 story apartments, 72-61 and 72-81 113 St. $830,000.

N. Y., Watertown—Good Samaritan Hospital, Bd. Trustees, plans by A. M. Skinner, 228 Arsenal St., hospital. $400,000.

N. C., Brevard—Brevard College, Dr. E. J. Coltrane, pres., raising funds new bldgs. $400,000.

O., Cincinnati—Bethesda Hospital, Reading Rd. and Oak St., J. A. Dickman, supt., plans by S. Hannaford & Sons, Dixie Terminal Bldg., 5 story, brick, steel nurses educational and dormitory bldg. $400,000. CD 10/30/40—ENR 11/7/40.

★O., Cleveland—Chandler Homes, c/o C. Chandler, 3407 Rocky River Dr., 120 frame houses. $675,000.

O., Mayfield (P.O., Cleveland Heights)—P. A. Frye Co., L. O. Young, in charge, Union Commerce Bldg., Cleveland, plans by H. H. Fisher, 945 Union Commerce Bldg., Cleveland, 75 frame houses. $450,000.

O., Mayfield (P. O. Cleveland)—J. Hoiselbauer, 1189 Melbourne Rd., East Cleveland, 30 frame houses. $180,000.

O., Youngstown — St. Columba's Parish, school, Wood and Hazel Sts. $150,000.

Tenn., Memphis—BUS TERMINAL—Dixie Greyhound Lines, Inc., 527 N. Main St., bus terminal, Union and Hernando Sts. $250,000.

Tex., Lubbock—Sisters of St. Joseph, 2605 19 St., plans by J. B. Roberts, Lubbock Natl. Bank Bldg., 3 story, 40x90 ft., brick, concrete hospital unit. $152,280. Applied for DPW funds.

Tex., Wichita Falls—Burkburnett Bldg. Co., P. Browning, pres., Burkburnett, 30 to 50 frame, semi-fireproof dwellings, etc. $150,000.

N. B., Rothesay—Owner, c/o Bishop P. A. Bray, Saint John, plans by F. Consiglo, 68 Stratford Rd., Hampstead, Que., church. $150,000.

Ont., Ottawa—L. Leblanc, archt., 100 George St., bids soon, diocesan seminary, for Episcopal Corp., 143 St. Patrick St. $150,000-$200,000.

Que., Drummondville—L. N. Audet, archt., 32 Wellington St. N., Sherbrooke, 75 bed hospital, for Congregation of Sisters of Hotel Dieu, Nicolet. $325,000. CD 11/20/40—ENR 11/28/40.

BIDS ASKED

★N. Y., New York—Ten Ten Park Ave. Corp., 19 W. 44 St., 19 story, penthouse, 97x123 ft. apartment, 85 St. and Park Ave. $1,500,-000. H. I. Feldman, 415 Lexington Ave., archt. CD 8/20—ENR 8/28.

Que., Montreal—I. S. Backler, engr., 302 St. Paul St. W., office and warehouse, Ogilvey Ave., for Steinberg's Service Stores, 1403 Overdale Ave. $350,000.

COMMERCIAL BLDGS. (Continued)

LOW BIDDERS

O., Cleveland—St. Lukes Hospital, Dr. F. G. Carter, E. 116 St. and Shaker Blvd., 3 story, 74x132 ft., brick, rein.-con. service bldg., from Cleveland Constr. Co., 3866 Carnegie Ave. Est. **$175,000.** CD 10/1—ENR 10/9.

CONTRACTS AWARDED

Calif., Long Beach—C. J. Jones, 5325 Atlantic Ave., 90 wood frame, stucco dwellings, Gardenia Ave., Luray and Silva Sts., etc., to Whaley Constr. Co., 5484 Atlantic Blvd., approx. **$222,600.** J. R. Friend, and W. Woollett, 816 Architects Bldg., Los Angeles, archts.

Calif., San Francisco—Zukor's, 923 Market St., rein.-con., steel store addns., to Mullen Mfg. Co., 69 Rausch St., **$150,000.** W. H. Ellison, Pacific Bldg., engr.

N. J., Maywood (br. Hackensack)—Builders Assocs., Inc., 441 Golf Ave., residential development, 37 two story, bsmnt., 24x32 ft., frame, brick veneer homes, day labor. **$222,000.** P. S. Simon, 210 Main St., Hackensack, archt.

N. J., Maywood (br. Hackensack)—Lenhome Builders, Inc., Tryon Ave., Teaneck, residential development, 40 two story, bsmnt., 24x32 ft., brick, frame homes, Forest Ave., separate contracts. **$200,000.** L. G. Feinen, 717 Cedar St., Teaneck, archt. CD 8/14—ENR 8/21.

N. Y., Buffalo—A. A. Umhauer, 133 Wecker St., 50 residences. Owner builds. **$300,000.**

N. Y., New York—Three Hundred West Seventy-Second St. Constr. Co. Inc., 35 Van Cortland Ave., 6 story, 61x90 ft. apartment, 251 West End Ave., separate contracts. **$150,000.** H. H. Lillien, 215 E. 149 St., archt. CD 10/16—ENR 10/23.

N. Y., New York—J. Wickler, 1351 Boscobel Ave., 6 story, 84x175 ft. apartment, Anthony Ave. near Burnside Ave. separate contracts. **$250,000.** H. H. Lillien, 215 E. 149 St., archt. CD 10/15—ENR 10/23.

N. Y., New York—J. S. Wickler, 1351 Boscobel Ave., 6 story, 85x100 ft. apartment, 51 W. 92 St., separate contracts. **$160,000.** H. H. Lillien, 215 E. 149 St., archt. CD 10/16—ENR 10/23.

N. Y., Niagra Falls—Strathmore Village, c/o J. Keller, Gluck Bldg., residences. Owner builds. Over **$150,000.**

★**N. Y., Syracuse**—Syracuse General Hospital, E. Castle St., hospital, to J. D. Taylor Constr. Corp., 115 S. Salina St. Est. **$500,000.** T. W. Gaggin, 1st Trust & Deposit Bldg., archt. CD 7/10/40—ENR 7/18/40.

O., Columbus—Beachwold Homes, Inc., 8 E. Broad St., eighty-eight 1 and 1½ story homes, Zooland addn., North Columbus, to E. Elford & Son Co., 555 S. Front St. **$400,000.** Awarded 10/17.

Pa., Oil City—Pennsylvania Telephone Corp., H. M. Engh, genl. mgr., 20 E. 10 St., Erie, general contract, incl. plumbing, electrical work, 1 and 3 story, 50x160 ft., brick, concrete, limestone, granite telephone office, garage and warehouse, to Wilson Constr. Co., 305 Bedford St., Johnstown; heating and air conditioning, to G. L. Scobel Co., 2027 State St., Erie. Est. **$210,000.** (**Correction**—general contractor.) CD 9/29—ENR 10/2 under CA.

Pa., Phila.—F. Blum, 480 Long Lane, Upper Derby, theatre, to S. H. Levin, 1619 Sansom St. Est. **$150,000.** Thalheimer & Weitz, Architects Bldg., archt.

Pa., Phila.—J. M. Fischer, Inc., 502 E. Godfrey Ave., 30 residences. Owner builds. Over **$150,000.**

Tex., Houston—C. E. King, Esperson Bldg., 50 brick veneer dwellings, concrete fdns., separate contracts. **$250,000.** CD 10/17—ENR 10/23.

Tex., Iowa Park—Iowa Park Bldg. Co., F. E. Hill, State Natl. Bank Bldg., 40 one story, frame, concrete dwellings, force account. **$150,000.**

Wis., Beloit—R. Levine & Co., 1235 S. Wabash Ave., Chicago, Ill., 50 residences, own forces. **$3,900** to **$4,300** ea. CD 10/1—ENR 10/9.

INDUSTRIAL BUILDINGS

PROPOSED WORK

Calif., Alameda — PLANT — Camisa Bros. Roofing Co., 1217 Central Ave., general plant expansion. $40,000.

Calif., Oakland—PLANT—Pacific Mill & Fixture Co., 901-77 Ave., plant expansion. $40,000.

Calif., Pittsburg—ROD MILL, etc.—Columbia Steel Co., Russ Bldg., San Francisco, semi-continuous rod mill addn., billet heating furnaces, rod cooling and handling equip., imprv., exten. wire and nail mill.

Calif., Sacramento—WAREHOUSE—Pioneer Baking Co., c/o C. C. Cuff, archt., 1315 Q St., warehouse. $40,000.

Calif., San Luis Obispo—RAILROAD STATION—Southern Pacific R. R., 65 Market St., San Francisco, W. H. Kirkbride, ch. engr., wood frame, stucco passenger and freight depot. $150,000.

Conn., Bridgeport — FOUNDRY — Peerless Aluminum Castings Co., 55 Andover St., 1 story, 65x144 ft., brick, steel, concrete foundry addn. $40,000. P. Petrovsky, 995 Main St., engr.

Conn., New Haven—FACTORY—New Haven Clock Co., 133 Hamilton St., sketches 2 story, 42x141 ft., brick, steel factory addn. $50,000. L. F. Caproni, 1221 Chapel St., New Haven, engr.

Ill., Rockford — MACHINE SHOP, etc. — Barnes Drill Co., A. M. Johnson, pres., 814-830 Chestnut St., soon lets contract 3 story, 77x81 ft., brick machine shop and forge addn. $40,000 incl. equip.

Ind., Elwood—PLANT—U. S. Plastic Insulation Corp., C. H. Bolte, mgr., Wabash, remodelling bldgs. North 9 St. and Pennsylvania R.R. $40,000 or more with equip.

Ind., Indianapolis — PLANT — Consolidated Rubber Lab. Inc., 400 Division St., rebuild and equip plant, destroyed by fire. $75,000 or more with equip.

★**Ia., Decorah**—POWER PLANT—Interstate Power Co., Decorah, enlarging power plant, incl. substation, new steam power plant. $1,000,000.

Ia., Dubuque—PLANT—Dubuque Packing Co., packing plant addn. $200,000.

Mass., Fitchburg—BAKERY—J. J. Padula, Water St., revised plans by H. E. Mason, 15 Prospect St., Leominster and bids soon, 2 story, 85x100 ft. brick, bakery, Water St. $40,000. Bids 10/14, rejected. CD 10/10—ENR 10/16.

Mo., St. Louis—FACTORY—Omar Tool & Machine Co., 1828 N. 17 St., soon lets contract 1 story, part basement, 75x150 ft., brick, concrete factory, Natural Bridge Ave. and Palm St. $40,000 incl. equip. C. G. Weinel, 6635 Delmar Blvd., archt.

★**N. J., Cape May**—FACTORY—Northwest Magnesite Corp., Farmers Bldg., Pittsburgh, Pa., magnesite factory, $1,000,000.

N. J., Jersey City—STOCK YARD—Jersey City Stock Yard Co., foot of 6 St., steel, concrete stock yard, pens, loading platform, etc., foot of 16 St. $100,000.

N. J., Lambertville—MILL—Universal Cotton Products, R. G. and W. M. Cory, archts., 30 Church St., New York, N. Y., soon let contract 1 story, bsmnt., brick, steel mill. Over $40,000.

N. Y., Albany—WAREHOUSE, etc.—Consolidated Motor Lines, Inc., 1179 Main St., Hartford, Conn., warehouse and terminal bldg., N. Ferry St. and Erie Blvd. Over $50,000.

N. Y., Binghamton — MARKET — Mohican Co., Chenango St., plans by A. T. Lacey & Sons, 52 Exchange St., market. $50,000.

N. Y., Brooklyn—FACTORY—Gair Realty Corp., 80 Washington St., plans by Wm. Higginson & Son, 101 Park Ave., New York, altering 9 story factory, 41-59 Washington St. $40,000.

★**N. Y., Buffalo**—SMELTING PLANT—Universal Smelting & Refining Corp., 2548 Elmwood Ave., smelting plant. Over $500,000.

N. Y., Massena — BOTTLING PLANT — Northern Coca Cola Bottling Wks., Inc., 162 Main St., plans by E. J. Manson, Ridgewood Ave., 2 story, 75x200 ft. bottling plant. $50,000.

N. Y., Ridgewood (sta. Brooklyn)—STORAGE—Greater New York Brewery, Inc., 501 1 Ave., New York, plans by J. D. Weiss, 119 W. 57 St., 3 story storage, 912 Cypress Ave. $125,000.

N. C., Charlotte — GARAGE — Mecklenburg Realty Co., W. G. Ross, pres., rebuilding garage destroyed by fire. Over $40,000.

O., Canton—TRUCKING TERMINAL—CCC Hy., Inc., 1940 10 St. N.E., 186x276 ft., brick, concrete, steel trucking terminal, 15 St. and Cleveland Ave. S.W. $150,000.

O., Cleveland—FACTORY—Yoder Mfg. Co., M. Y. Yoder, pres., 5500 Walworth Ave., 1 story, 70x300 ft. steel factory addn. $60,000. W. Hatch, Hippodrome Bldg., engr.

O., Dayton—FACTORY — Univis Lens Co., 401 Lee St., plans by George Neuffer, 1812 Burbank Dr., and bids soon, 2 story, 80x160 ft., steel, concrete, brick, factory addn., plain fdn., Leo St. $90,000.

O., Warren — FACTORY — Taylor-Winfield Corp., factory addn. $100,000 or more.

Pa., Bridgeville—SERVICE — Cyclops Div. Universal Cyclops Steel Corp., U. Grant Miller, vice pres. and works mgr., Bridgeville, plans by S. Lloyd Beall, Washington Trust Bldg., Washington, service and office bldg. A. P. Krepp, c/o owner, Bridgeville, plant engr.

Pa., Centerport — PLANT — Farmer's Dairy Co., J. B. Christie, pres., Centerport, plans by E. H. Adams, Esterly, 1 story, brick, tile, concrete dairy products plant. $40,000 with equip.

R. I., Cranston — PLANT — Warwick Club Ginger Ale Co., Pepsi-Cola Bottling Co. of Rhode Island, lessee, 108 Pond St., West Warwick, 3 story, brick bottling plant. $50,000.

Tex., Arlington—PLANT—Southern Ornamental Iron Wks., Arlington, plant. $90,000.

Tex., Borger—REFINING UNIT—Phillips Petroleum Co., Bartlesville, Okla., and Borger, 100 octane gasoline refining unit. $200,000.

Tex., Corpus Christi — [illegible]PINERY — Gloria Corp., Corpus Chris[illegible] Isobutane p[illegible] type gasoline refinery unit. [illegible]175,000.

Tex., Dallas—FACTORY, [illegible]—J. Y. My[illegible] 3911 Cedar Springs Rd., [illegible] soon, 1 st[illegible] 72x110 ft. clothing factory [illegible] storage. $[illegible] 000. R. E. Lane, 208 Com[illegible] Bldg., archt.

Tex., Dallas—COLD ST[illegible]GE PLANT—Wicker Fish & Poultry Co., [illegible]04 Gaston [illegible] plans by J. A. Pitziner, Sou[illegible] and Life Bl[illegible] cold storage plant, 26x60 [illegible] freezing ro[illegible] Over $40,000.

Tex., Deer Park—REFIN[illegible] UNIT—Sh[illegible] Oil Corp., Shell Bldg., Hous[illegible], hydrocod[illegible] plant type gasoline refining [illegible]. $200,000.

Tex., Port Arthur—PLAN[illegible]—Gulf Refin[illegible] Co., Port Arthur, gasoline refining [illegible] $225,000.

Tex., Terrell—PLANT—Ke[illegible]en Ice Cre[illegible] Mfg. Co., Terrell, plans by J. A. Pitzinge[illegible] Southland Life Bldg., Dallas, 1 story, 35x1[illegible] ft. and 61x98 ft. L-shaped ice cream pla[illegible] tile, steel. $40,000.

Wash., Spokane—REFINERY—Inland Em[illegible]pire Refineries, oil refinery addn. $300,000.

Alta., Edmonton—FACTORY—Great We[illegible]ern Garment Co. Ltd., 10305 97 St., plans by Rule, Wynn & Rule, 254 Birks Bldg., 2 story steel factory, concrete fdn. $125,000.

Alta., Nordegg—PLANTS—Brazeau Collie[illegible] Ltd., Nordegg, briquetting plants. $40,000.

B. C., Duncan—SAW MILL—E. L. Robe[illegible] Logging Co. Ltd., Duncan, saw and shingle mills. $40,000.

B. C., New Westminster—BAKERY—Ka[illegible] Smith Bakeries, Ltd., 337 Girth St., bakery etc. $50,000.

B. C., Vancouver—QUARRY—Asphalt Prod[illegible]ucts Ltd., 725 Standard Bank Bldg., mixe[illegible] concrete and asphalt products quarry. $1[illegible] 000.

B. C., Vancouver — MANUFACTURING PLANT—Bingham & Hobbs Equipment Co. Ltd., 706 Lumbermen's Bldg., plant. $40,000.

B. C., Vancouver — PLANT — Chain Saw Ltd., 1539 3 Ave. W., steel and iron product mfg. plant. $40,000.

B. C., Vancouver—PAPER PLANT—Coast Paper Ltd., 311 Bank of Nova Scotia Bldg., paper mfg. plant. $50,000.

B. C., Vancouver—PLANT—Malaspina Fisheries, Ltd., 678 Howe St., packing reduction plant and canning plant. $50,000.

B. C., Vancouver—PLANT—Manton Bros. Ltd., 105 Elizabeth St., Toronto, Ont., plant. $40,000.

B. C., Vancouver—PLANT—Marpole Brick Co. Ltd., 9242 Hudson St., brick, tile drain, sewer pipe mfg. plant. $50,000.

B. C., Vancouver—MILLS—National Saw Mills Ltd., 14 Rogers Bldg., saw, shingle and logging mills. $50,000.

B. C., Vancouver—PLANT—Pearson Wire & Iron Wks. Ltd., 2105 Franklin St., plant. $40,000.

B. C., Vancouver—PLANT—Sumas Grape Juice & Wine Co., Ltd., 553 Granville St., plant. $40,000.

N. S., Halifax—PLANT—Maple Leaf Dairy Ltd., 7 Chelucto Rd., brick plant exten., concrete fdn. $40,000.

Ont., Atikokan — GENERATING PLANT—Hydro-Electric Power Comn. of Ontario, 620 University St., Toronto, relocating generating plant. $100,000.

Ont., Georgetown — PLANT — Provincial Paper Co. Ltd., Georgetown, plant. $40,000. T. Embleau, c/o owner, engr.

Ont., Guelph—PLANT—Columbia Dressers & Dyers Ltd., Guelph, cleaning and dyeing plant.

Ont., New Toronto—PLANT—Campbell Soup Co. Ltd., 14 1 St., plans by Mathers & Haldenby, 96 W. Bloor St., Toronto, plant exten. $150,000.

Ont., Port Sydney—PLANT—N. Tooke, Port Sydney, cereal manufacturing plant.

Ont., St. Catharines — PLANT — Lord & Burnham Co. Ltd., Vine St., plans by A. E. Nicholson, 46 Queen St., and bids soon, altering, constructing plant addn., Welland Ave. E. $40,000.

Ont., Sioux Lookout — PLANT — Patricia Lumber Co. Ltd., plant exten. $50,000.

Ont., Toronto—PLANT—Canada Packers Ltd., St. Clair Ave. W., bids soon, plant, St. Clair Ave., west of Keele St. $40,000.

Ont., Toronto—PLANT—Standard Ultramarine Co. of Canada, Ltd., Huntington, W. Va., U.S.A., plant exten. $75,000.

Ont., Toronto — PLANT — Stein-Hall, Ltd., 250 Van Horne St., plant addn. $40,000.

Que., Knowlton—SAW MILL—Bolton Lumber Co. Ltd., Knowlton, saw mill.

Que., Montreal—PLANT—Lambert Inc., 58 W. Notre Dame St., plans by L. Parent, 10 W. St. James St., altering shoe mfg. plant. $40,000.

Que., St. Joseph d'Alma—FACTORY—Montgomery & Bilodeau, St. Joseph d'Alma, chemical factory. $50,000.

INDUSTRIAL BLDGS. (Proposed Work, Cont'd.)

Que., St. Laurent—FACTORY—Glory Brand, Ltd., c/o Ernest Pitt & Co., 660 St. Catherine St. W., Montreal, bids soon, food factory. $40,000.

Que., Three Rivers—PLANT—Paul & Waddy Aboud, 865 Marguerite St., bids soon 2 story, bsmnt., 90x100 ft. shirt mfg. plant, brick veneer. $40,000.

BIDS ASKED

Bids Asked November 7

Wis., Genoa—PLANT—Tri-State Power Cooperative, 312 Rivoli Bldg., LaCrosse, superstructure 1 and 3 story, 100x200 ft., concrete, brick, rein.-con. power plant addn. Rural Lines Engineers, Central Bldg., Clayton, Mo., engr. CD 10/1—ENR 10/9.

Bids Asked

★**Ill., Rockford**—PLANT—Geo. D. Roper Corp., Rockford, 60x264 ft. plant addn. $600,000. Bradley & Bradley, Brown Bldg., archts.

N. Y., Brooklyn—MACHINE SHOP—Cameron Machine Co., 61 Poplar St., 1 story, 76x95 ft. machine shop, 90 Fulton St. $40,000. H. M. Sushan, 367 Fulton St., engr. CD 10/10—ENR 1/16.

LOW BIDDERS

Calif., Burbank—WAREHOUSE—Vega Airplane Co., 2555 N. Hollywood Way, warehouse, 2555 N. Hollywood Way, from Myers Bros., 3407 San Fernando Rd., Los Angeles, **$459,130.** Parkinson & Parkinson, 434 Title Insurance Bldg., Los Angeles, archts.

CONTRACTS AWARDED

Calif., Downey—SHIPPING STORAGE, etc.—G. B. Kaufmann, archt., 627 Carondelet St., Los Angeles, 6 bldgs., incl. storage service bldg., service garage, gasoline loading dock, 1 story, steel frame, reinforced brick, corrugated iron, for Vultee Aircraft Co., 842 Lakewood Blvd., to Engineers, Ltd., 605 W. Olympic Blvd., Los Angeles. **$158,300.** Bids 10/11. CD 10/3—ENR 10/16.

Calif., Hawthorne — FACTORY — Northrop Aircraft, Inc., 1001 E. Bway., unit addn., mezzanine floor to 55x150 ft. factory, 1001 E. Bway., to E. S. McKittrick Co., 7839 Santa Fe Ave., Huntington Park, approx. **$60,000.** N. Werner, 257 S. Spring St., Los Angeles, engr.

Calif., Oakland — WAREHOUSE — West Coast Soap Co., 2501 Poplar St., 1 story, steel warehouse, day labor. **$60,000.**

Calif., Redwood City — WAREHOUSE — S. and W. Fine Foods, Inc., 155 Berry St., San Francisco, reiln.-con. warehouse addn., to C. N. Swenson, 355 Stockton Ave., San Jose. **$50,000.** CD 10/8—ENR 10/16.

Calif., Salinas—WAREHOUSE, etc.—C. E. Butner, archt., 7 Winham St., 1 story, 95x120 ft., rein.-con. warehouse and bottling plant, for Coca Cola Bottling Co., to F. V. Hampshire, 246 Hawthorne St., **$42,000.** CD 10/1—ENR 10/9.

Calif., San Francisco—MILL, etc.—Grosjean-Callaghan Investment Co., 3230 20 St., 5 story, rein.-con. rice mill and general plant expansion, to Anderson & Ringrose, 320 Market St., **$128,785.**

Calif., San Francisco—GARAGE—Tidewater Associated Oil Co., 79 New Montgomery St., 1 story, rein.-con. garage, to W. C. Tait, Inc., 833 Market St. **$50,000.** V. E. Raney, 233 Post St., archt.

Calif., San Jose — WAREHOUSE — Calif., Packing Corp., 101 California St., San Francisco, 1 story warehouse, to J. F. Tulloch, 3426 Ettie St., Oakland. **$45,000.**

Calif., San Leandro—FACTORY—National Automotive Fibres, Inc., Railroad Ave. and Kennedy St., factory, to A. T. Beckett, 366-40 St., Oakland. **$283,000.** CD 8/6—ENR 8/14.

Calif., San Mateo—WAREHOUSE—P. Reed, 3 Ave., warehouse, to G. Arthur & Sons, 941 S. Claremont St., **$40,000.**

Calif., West Los Angeles—FACTORY—H. W. Houston Co., c/o S. C. Lee, archt., 1648 Wilshire Blvd., Los Angeles, reinforced brick, steel factory, Olympic Blvd. and Granville Ave., to A. V. Perkinson, 1149 N. Las Palmas St., Los Angeles. **$40,000.**

Conn., East Hartford (br. Hartford)—DYNAMOMETER UNIT, etc.—Pratt & Whitney Div. United Aircraft Corp., 400 Main St., brick, steel, concrete dynamometer unit, experimental hangar, hangar addn., employment bldg., to Wadhams, May & Carey Co., 15 Lewis St., Hartford. **$127,364.** Albert Kahn & Associates, 345 New Center Bldg., Detroit, Mich., engrs.

★**Idaho, Nampa**—FACTORY—Amalgamated Sugar Co., H. A. Benning, vice-pres. and genl. mgr., Odgen, sugar factory, company forces. **$2,000,000.** CD 10/17—ENR 10/23.

Ind., Anderson — SUBSTATIONS — Indiana General Service Co., Muncie, substations, own forces. **$50,000.**

★**Ind., Gary**—FURNACE — Carnegie-Illinois Steel Corp., Bway. and River, open hearth furnace, soaking pits, ore unloading facilities, own forces. **$15,000,000** incl. equip.

Md., Baltimore—FACTORY—L. Greif & Co., 301 Homeland Ave., 1 story, 60x240 ft., brick, steel factory addn., concrete fdn., to Baltimore Contractors, 23 N. Central Ave. **$45,000.**

★**Md., Hagerstown**—PLANT—Fairchild Aircraft Corp., Hagerstown, 1 and 2 story, steel, brick mfg. plant, rein.-con. fdns., to Price Const. Co., Md. Trust Bldg., Baltimore. **$750,000.** Bids 10/13. CD 10/3—ENR 10/9.

Mass., Malden (br. Boston)—WAREHOUSE—Parsons & Wait, archts., 234 Boylston St., 1 story, 80x125 ft., brick, glazed terra cotta warehouse, for Wadsworth Howland Div. Devoe Reynolds, Co. Inc., Green St., to Lawson W. Oakes, Inc., 30 Huntington Ave., Boston. Est. **$40,000.** Bids 10/8. CD 10/3—ENR 10/9.

Mass., Worcester—FOUNDRY—Rice-Barton Corp., Tainter St., 1 story, 50x160 ft., brick, concrete foundry, 1 story, 16x28 ft. core casting oven, to E. J. Cross Co., 150 Prescott St. Est. **$42,000.** CD 2/25—ENR 2/27.

Mich., Detroit—WAREHOUSE — Anheuser-Busch, Inc., 1969 W. Fort St., brick, concrete warehouse and storage, plain fdn., to F. H. Martin Constr. Co., 955 E. Jefferson Ave. Est. **$44,000.** Pollmar, Ropes & Lundy, 2935 Woodward Ave., archts.

Mich., Detroit — PLANT — Chrysler Corp., Massachusetts Ave., Highland Park, brick, steel, rein.-con. bldg. for chip bins and incinerator, tank arsenal plant, to W. E. Wood Co., 4629 Humboldt Ave. Est. **$40,000.** Albert Kahn & Associates, 345 New Center Bldg., archts.

Mich., Detroit—FACTORY—Continental Motors Corp., 1280 Algonquin Ave., 70x157 ft., brick, steel, concrete factory addn. for engine test bldg., plain fdn., to F. H. Martin Constr. Co., E. Jefferson Ave. Est. **$150,300.** Giffels & Vallet, 1000 Marquette Bldg., engrs.

Mich., Highland Park (br. Detroit)—FACTORY—Robbins Eng. Co., 635 Mt. Elliott Ave., Detroit, 2 story, 80x151 ft., brick, steel, concrete machine shop, plain fdn., to Clausen Co., 15529 Woodrow Wilson Ave., Detroit. Est. **$40,000.**

Minn., Minneapolis—PLANT — Minneapolis-Honeywell Regulator Co., 273 4 Ave. S., general contract 4 story, rein.-con., brick top addn. plant, to C. F. Haglin & Sons, 720 National Bldg. Est. **$350,000.** E. J. Prondzinski, 240 Plymouth Bldg., archt.

Mo., St. Louis—FACTORY—Measuregraph Co., 4245 Forest Park Blvd., 1 story, bsmnt., 55x100 ft., brick, concrete factory addn., to William H. and Nelson Cunliff Co., 3320 Lindell Blvd. Est. **$40,000.** G. Neff, 3320 Lindell Blvd., archt.

Mo., St. Louis—FACTORY—Paraseal Corp., 4215 Clayton Ave., 2 story, 100x158 ft., rein.-con. factory addn., to Shasserre Constr. Co., Fullerton Bldg. Mines Equipment Co., 1909 S. Kingshighway Blvd., lessee. N. I. Bailey, 26 Fern Ridge, Valley Park, archt. W. C. E. Becker, 4119 San Francisco Ave., engr.

N. J., Garwood—FACTORY—Aluminum Co. of America, 7 Ave. and Grant St., Pittsburgh, Pa., 1 story, 40x60 ft., brick, steel aluminum factory addn., alterations, South Ave., to Hansen & Jensen, Inc., 337 N. Broad St., Elizabeth. Over **$40,000.** J. M. Schrieber, 7 Ave. and Grant St., Pittsburgh, Pa., engr.

N. J., Harrison — MANUFACTURING — J. Chein & Co., 310 Passaic Ave., 1 story, 87x125 ft., brick, steel mfg. addn., Passaic Ave., to Roth Buermann Co., 319 Mt. Pleasant Ave., Newark. **$50,000.**

N. J., Hawthorne — PLANT — Morningstar Nichol, Inc., Utter and 4 Aves., 2 story, 60x80 ft., brick, steel plant addn., to E. Reihl Co., 85 Delaware Ave., Paterson. **$60,000.** J. J. Sheridan, 18 E. 41 St., New York, N. Y., archt.

★**N. J., Mount Hope**—HOIST HOUSE, Etc.—Warren Fdry. & Pipe Co., Mount Hope Rd., design and construction 1 story, bsmnt., brick, stone, hoist house, mill bldg., head bldg. and change house, 6 way mine shaft, 2,500 ft. deep Mt. Hope Rd., to J. G. White Eng. Corp., 80 Broad St., New York, N. Y. **$2,000,000.**

N. J., Woodbridge — PLANT — Bloomfield Scrap Iron & Metal Co., Leesville Ave., Rahway, 1 story, part bsmnt., 50x200 ft., cinder block, steel waste material plant, Leesville Ave., separate contracts. J. Centenni, 278 Summer Ave., Newark, archt.

N. Y., Bolivar—PLANT—Alleghany Refiners, Inc., Bolivar, plant addn., to Rust Constr. Co., Land Title Bldg., Pittsburgh, Pa. Est. **$40,000.**

★**N. Y., Buffalo** — PLANT — Bell Aircraft Corp., 2050 Elmwood Ave., airplane plant, to Austin Co., 16112 Euclid Ave., Cleveland, O. Est. **$4,300,000.**

N. Y., Penn Yan—BOILER HOUSE—W. H. Fox & Sons, Inc., J. C. Fox, pres., boiler house addn., separate contracts. **$40,000.**

O., Cleveland—FACTORY—Cuyahoga Tool & Mold Co., J. H. Love, pres., 16131 Holmes Ave., 1 story, 56x60 ft., brick, steel factory addn., to C. O. Jensen, 12403 Woodside St. Est. approx. **$40,000.** W. A. Bingham, City Hall, Euclid, archt. Awarded 10/21.

O., Cleveland—FACTORY—Globe Machine & Stamping Co., R. S. Geddes, pres., 1250 E. 76 St., altering, constructing brick, steel factory addn., to Sam W. Emerson Co., 1836 Euclid Ave. Est. **$40,000.** CD 10/1—ENR 10/9.

O., Cleveland — FACTORY — La Ganke & Sons Stamping Co., H. C. La Ganke, pres., 864 E. 140 St., masonry work for 42x130 ft., brick, steel factory, to Wm. West & Son, 1609 Sherbrooke Rd., South Euclid. **$40,000.** Bids 9/25. CD 9/23—ENR 9/25.

O., Kent—FACTORY—Twin Coach Co., P. H. Brehm, genl. mgr., Kent, 1 and 2 story, 148x250 ft. and 40x60 ft., brick, steel factory addns., to H. K. Ferguson Co., 1650 Hanna Bldg., Cleveland. Est. **$125,000.** Awarded 10/16. CD 2/14—ENR 2/20.

O., Lorain—FACTORY, etc.—American Stove Co., T. Sourbreck, mgr., E. 13 and Long Sts., 1 story, 120x233 ft., brick, steel factory and warehouse, to James C. F. Shafer Co., Caxton Bldg., Cleveland. Est. **$50,000.** Awarded 10/15. J. O. Rounds, c/o owner, ch. engr.

O., Middletown—PLANT—Aeronca Aircraft Corp., steel, brick aircraft assembly plant addn., plain fdn., Germantown Rd., to W. F. Conradt & Son, Hamilton. **$60,000.**

Ore., Portland—WAREHOUSE—B. P. John Furniture Co., 5190 S. W. Macadam Rd., 5 story warehouse, to Bingham Constr. Co., Couch Bldg. Est. **$100,000.** T. H. Heppeard, 6707 SE 34 Ave., archt.

Pa., Jeannette — WAREHOUSE — Frank Levin Furniture Co., F. Levin in charge, 2 story, bsmnt., 60x122 ft., steel, brick, concrete block warehouse, Magee St., to Westmoreland Constr. Co., 622 W. Pittsburgh St., Greensburg. Bids 10/18. CD 10/15—ENR 10/23.

★**Pa., Phila.** — FACTORY — National Can Co., 1505 Broad St., three 150x300 ft. factory bldgs., to Brown & Matthews, Inc., 122 E. 42 St., New York, N. Y. Est. **$500,000.**

Pa., Reading — LABORATORY — Wilhelm Paint Wks. Div. of Glidden Co., 1801 N. 3 St., brick, steel, concrete research laboratory and locker bldg., to L. H. Focht & Son, Inc., Baer Bldg. Est. **$75,000.** W. J. Senner, c/o owner, engr.

S. C., Chester—PLANT—Borden Co., Chester, 102x245 ft. milk plant exten., with 27 ft. additional ft. for office, to McDevitt & Street, Builders Bldg., Charlotte, N. C. Est. **$200,000** with equip.

Tex., Dallas—WAREHOUSE, etc.—International Harvester Co., 180 N. Michigan Ave., Chicago, Ill., 1 and 2 story, brick, steel warehouse and office, to Geo. P. O'Rourke Constr. Co., 2019½ Jackson St., approx. **$190,000.** Bids 8/12. CD 8/5—ENR 8/7.

Tex., Elsa — PLANT — Englemen Products Co., Elsa, 2 story vegetable and citrus packing and processing plant, brick, concrete, day labor. **$40,000.**

★**Tex., Grand Prairie** — PLANT — North American Aviation, Inc., Grand Prairie, flight test bldg., ramps, concrete storage bldg., garage, etc., airplane plant, to Jas. Stewart & Co., 230 Park Ave., New York, N. Y. Approx. **$1,250,000.** Allen & Kelley, Architectural Bldg., Indianapolis, Ind., engrs. CD 8/21—ENR 8/21.

Tex., Texas City — CHEMICAL PLANT — Carbide & Carbon Chemicals Corp., 30 E. 42 St., New York, N. Y., design and construction plant expansion, to Ford, Bacon & Davis, Inc., 39 Bway., New York, N. Y. Approx. **$350,000.** Additional to CD 6/10—ENR 6/13, under CA.

Va., Richmond — WAREHOUSE — General Baking Co., 420 Lexingon Ave., New York, N. Y., 76x325 ft. warehouse, to Irons & Reynolds, 420 Lexington Ave., New York, N. Y. Est. **$75,000.** P. Monoghan, 1518 Locust St., Phila., Pa., archt.

Wash., Seattle—OIL STORAGE—Bethlehem Steel Co., 4001 28 Ave. S.W., oil storage unit, with four 52x40 ft. steel tanks on concrete fdns., own forces. **$65,000.**

Wis., Eau Claire—GARAGE — Schumacher Motor Express Co., 807 Oxford Ave., 1 story, part bsmnt., 55x100 ft., brick, steel garage, to P. Walker & Son, 217 Hobart St. CD 10/16—ENR 10/23.

Wis., Oconomowoc—WAREHOUSE—Oconomowoc Canning Co., 626 E. Wisconsin Ave., 1 story, 80x144 ft., steel, concrete block warehouse, day labor.

Wis., Racine — GARAGE — Racine Motor Coach Lines, Inc., 1510 Goold St., 1 story, 51x120 ft., brick, steel garage addn., to Nelson & Co., Inc., 1550 Yard St.

Ont., Chippawa—PLANT—Norton Co. Ltd., Chippawa, 1 story, 70x100 ft., structural steel, clay, tile plant, to Smith Bros. Constr. Co. Ltd., 1740 Ellen Ave., Niagara Falls. **$86,000** incl. equip.

Ont., Fort William—DIGESTOR TOWER—Great Lakes Paper Co. Ltd., Fort William, rein.-con., brick digestor tower, Westfort plant, to Barnett-McQueen Co. Ltd., 460 Christina St. Est. **$350,000** incl. equip.

Ont., Guelph—FOUNDRY—Callander Fdry. Co., M. Callander, Omar St., 1 story, 90x120 ft., brick, steel addn. Owner builds. **$40,000.**

Ont., St. Catharines—FACTORY—St. Catharines Steel Products Co., Vine St., 1 story, 100x125 ft., brick factory addn., to T. R. Stork, R.R. 4. Est. **$60,000.** Awarded 10/24. A. E. Nicholson, Queen St., archt.

★**Que., Montreal** — MILL — Ogilvie Flour Mills Co. Ltd., Sun Life Bldg., rein.-con., brick addns. to Royal Mill, 60x65 ft. dump house, 47x72 ft. head house, 2 story, 40x120 ft. warehouse, office and laboratory bldg., to E. G. M. Cape & Co. Ltd., 620 Cathcart St. About **$500,000.** E. Cormier, 2039 Mansfield St., archt. R. A. Rankin & Co., 1420 Sherbrooke St. W., engrs.

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
COPY RECEIVED UP TO 12 NOON TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST-MINUTE ADS
SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

Bids: November 14 (622)

Sewers

Sealed bids will be received up to 8 P.M. (Eastern Standard Time) November 14, 1941 by the Borough Council of the Borough of Jenkintown, at the Borough office, Jenkintown, Pa. for the construction of approximately 3900 feet of 8" sanitary sewer and approximately 600 feet of 6" sanitary sewer (lateral connections) in the Noble Vista Section of the Borough of Jenkintown.

Plans and specifications may be obtained from Mr. A. C. J. Schabacker, Secretary, Borough Hall, Jenkintown, Pa., or from George B. Mebus, Borough Engineer, 112 South Eastern Road, Glenside, Pa., upon deposit of $10.00 of which the sum of $5.00 will be refunded upon the return of said plans and specifications to the Engineer in good condition, on or before November 29, 1941.

The Borough Council reserves the right to reject any or all bids and award the contract as they may deem to the best interests of the Borough.

By order of the Borough Council.
A. C. J. Schabacker
Borough Secretary

Bids: November 18 (634)

Viaduct

PUBLIC WORKS DEPARTMENT
KANSAS CITY, MISSOURI
SOUTHWEST TRAFFICWAY PROJECT
MAIN VIADUCT
FOR
KANSAS CITY, MISSOURI

Sealed proposals for the construction of the Main Viaduct of the Southwest Trafficway Project, Kansas City, Missouri, will be received by A. C. Everham, Director of Public Works of Kansas City, Missouri, at his office in the City Hall, 20th Floor, in Kansas City, Missouri, until 2:00 o'clock P.M. on the 18th day of November, 1941 (after which time no bids will be received).

The viaduct includes about 1700 tons of girder spans, 850 tons of reinforcing steel, 9500 cubic yards of concrete, and 35,000 lineal feet of concrete or steel piling, and other materials. The work will be let under one or two contracts.

Proposals shall be made on Proposal forms accompanying and indentical with the Proposal of the Contract Documents, delivered in a sealed envelope, addressed to A. C. Everham, Director of Public Works, and marked so as to indicate its contents. Construction will be executed under two contracts or under one contract: Contract No. 1, Substructure; Contract No. 2, Superstructure; Contract No. 3, Complete Structure. Proposals may be made under any or all contracts. Award will be on the basis of lowest total cost.

Contract documents, plans and specifications may be examined at the office of the Director of Public Works, Kansas City, Missouri, and at the office of the Consulting Engineers, Howard, Needles, Tammen & Bergendoff, 1012 Baltimore Avenue, Kansas City, Missouri. Copies of contract documents, plans, specifications, and proposal forms may be secured from the Consulting Engineers upon Payment of Thirty Dollars for Contract No. 1; Thirty-five Dollars for Contract No. 2; or Sixty-five Dollars for Contract No. 3. Any bidder who has made such a deposit may secure extra blue print copies of any plan upon payment of twenty-five cents per sheet, and additional copies of the specifications upon payment of Two Dollars per copy. All contract documents, including plans, except documents filed as bids, shall be returned to the Consulting Engineers. The full amount of deposit for one set of documents will be refunded to each actual bidder. For all other complete documents returned in good condition, there will be a refund of one half of the amount of the deposit.

Each bidder shall deposit with the Director of Finance, cash or a certified check drawn on some solvent Kansas City Bank or Trust Company in the following amounts. For Contract No. 1 only, 10,000 Dollars; For Contract No. 2 only, 22,000 Dollars; For Contract No. 3 only, 32,000 Dollars; or For Contracts No. 1 and No. 2 or For No. 3, or for all three contracts 32,000 Dollars; and attach to his bid the receipt of the Director of Finance therefor as bid security, as stated in the Contract Documents.

Each bidder shall have on file with the Director of Public Works not later than the date and time of opening bids, a sworn financial statement, prepared by a reputable certified public accountant, on forms which will be supplied, and an experience record. Any bid received from a Contractor who is in default with the City on any previous Contract will not be considered.

Amounts bid in proposal shall cover all State and Federal Taxes chargeable against the performance of the construction of these structures, such as Sales Tax, Social Security, etc., such taxes, if any, to be paid by the Contractor.

No bidder may withdraw his bid within thirty (30) days after the above time and date for opening bids. The Director of Public Works reserves the right to reject any or all proposals, to waive informalities, and to award any contract without awarding any other contract.

By virtue of statutory authority a preference will be given to material, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri.

All proposals shall be filled in with ink or typewriter.

A. C. EVERHAM,
Director of Public Works
of Kansas City, Missouri.

Bids: November 25 (613)

Sewage Treatment Plant and Garbage Incinerator

OUTFALL SEWERS
CITY OF STAMFORD, CONN.

Sealed bids for the construction of Outfall Sewers, Sewage Treatment Plant and Garbage Incinerator for the City of Stamford, Connecticut, will be received at the office of the Commissioner of Finance, Room 21, Town Hall Building, Stamford, Connecticut, until 2 P. M. (Eastern Standard Time) on the 25th day of November, 1941, and then at said office publicly opened and read aloud.

The Information for Bidders, Form of Bid, Form of Contract, Plans, Specifications and Form of Performance Bond may be examined at the office of the City Engineer, Stamford, Conn., and at the office of Solomon & Keis, Consulting Engineers, 257 Broadway, Troy, N. Y., copies thereof may be obtained at the said offices of the City Engineer, or Solomon & Keis, upon payment of $25.00 for each set. Any bidder upon returning such set promptly and in good condition will be refunded his payment, and any non-bidder upon so returning such set will be refunded $15.00.

The City of Stamford, Conn., reserves the right to waive any informalities in, or to reject any, or all bids.

A certified treasurer's or cashier's check made payable to the order of the City of Stamford, Conn., in the amount of five per centum (5%) of the bid must be deposited by each bidder with his bid as a guarantee that in case the contract is awarded to him, that he will within five (5) days thereafter, execute such contract and furnish a satisfactory performance bond. On failure to do so, he shall forfeit the deposit as liquidated damages, and acceptance of the bid will be contingent upon the fulfillment of this requirement by the Bidder.

The successful bidder will be required to furnish a performance bond satisfactory to the City of Stamford, Conn., in the amount of the contract, and having as surety thereon such surety company or companies as are acceptable to the City of Stamford, Conn.

The work will be let in seven separate contracts as follows:

Section I—Outfall Sewers.
Section II—
- Subdivision No. 1—General Construction.
- Subdivision No. 2—Garbage Incinerator.
- Subdivision No. 3—Sludge Drying Equipment.
- Subdivision No. 4—Electrical Work.
- Subdivision No. 5—Plumbing.
- Subdivision No. 6—Heating and Ventilating.

No Bidder may withdraw his bid within 45 days after the date set for the opening thereof. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof.

Date: October 10th, 1941.
JOHN F. CONNOLLY,
Commissioner of Finance.

Solomon & Keis,
Consulting Engineers,
Troy, N. Y.

Bids: November 14. (616)

Superstructures for Filtration Plant

GENERAL WORK
SUPERSTRUCTURES
SOUTH DISTRICT FILTRATION PLANT
DEPARTMENT OF PUBLIC WORKS
CITY OF CHICAGO
CHICAGO, October 10, 1941.

SEALED PROPOSALS will be received by the City of Chicago until 11 A. M., Friday, November 14, 1941, at Room 406 City Hall, for the construction of the Superstructures of the Low Lift Pumping Station, the Filter Building and the Administration Building of the South District Filtration Plant, located in the vicinity of East 79th Street and Lake Michigan, Chicago, Illinois, according to plans and specifications on file in the office of the Department of Public Works of said City, Room 406, City Hall.

The general scope of the work to be done includes all concrete and masonry, carpentry and millwork, lathing and plastering, roofing, architectural iron, certain mechanical equipment, plumbing, heating and electrical work. The major structural steel framework is being done by others.

Proposals must be made out upon blanks furnished at said office, and be addressed to said Department, indorsed "Proposal for General Work, Superstructures, South District Filtration Plant," and be accompanied with Fifty Thousand Dollars ($50,000.00) in money or a certified check for the same amount on some responsible bank located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works.

Plans and specifications may be obtained upon payment of Twenty-five Dollars ($25.00) for each set, which will be refunded upon the return of said plans and specifications in good condition within thirty (30) days after the opening of bids. Deposits to be in the form of money or certified check.

In accordance with the provisions of the Act of the General Assembly of the State of Illinois, entitled "An Act regulating wages of laborers, mechanics and other workmen empoyed under contracts for public works," approved June 26, 1941, the general prevailing wage rates for work at the construction site are set forth in the specifications.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party submitting the same shall furnish evidence satisfactory to the Commissioner of Public Works of ability, and the possession of the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications.

OSCAR E. HEWITT,
Commissioner of Public Works.